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ABSTRACT

This profile of child and adolescent health, which was designed for policymakers and program planners, contains over 40 indicators grouped into 10 categories: (1) population characteristics; (2) socioeconomic status; (3) program participation; (4) health care access; (5) pregnancies, births and infant health; (6) adolescent health; (7) morbidity; (8) children with special needs; (9) injury, abuse and maltreatment; and (10) mortality. Most of these indicators are introduced with a narrative that contains a definition of the indicator, an explanation of its significance for health, and important relationships between the indicator and other factors, such as race and ethnicity, age, and poverty. In some cases, the source of the data is described and, when necessary, limitations of data are noted. The U.S. Public Health Service 1990 objectives for the nation, and New York's status vis-a-vis these objectives, are also presented for selected indicators. Additional key information, such as national data, trends, research findings, or highlights from the tables, is provided at the end of the narratives. Some of the state-level data are displayed in graphs, but data for most of the indicators are displayed in tables at three levels: for the state as a whole; for both New York City and the rest of the state; and for individual counties. Most of the tables present both numbers and rates. Technical notes at the end of the report provide further explanations, definitions, and other information. (RH)

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CAHP

Child and Adolescent Health

PROFILE

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CHILD AND ADOLESCENT HEALTH PROFILE PROJECT

The Child and Adolescent Health Profile Project was undertaken both to develop a comprehensive picture of the health status and needs of New York's population under age 19 and to provide a replicable model for other states to use in obtaining and presenting similar information about their own populations. The project represents a major initiative on the part of New York State, first, to identify and integrate a wide range of data on children's health status, access to health care, and sociodemographic characteristics and, second, to use those data for the purposes of planning, resource allocation, and the monitoring of programs and policies.

The *Child and Adolescent Health Profile: New York State 1985* combines existing data from multiple sources to provide a comprehensive overview of infant, child, and adolescent health. The project has also produced an annotated bibliography of publications about measures of child and adolescent health. Forthcoming products include a 1986 update, a guide to the data sources used in the profile reports, and a replication manual.

Collaborating on the project with Welfare Research, Inc., are the New York State Council on Children and Families and the New York State Department of Health.

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January 1988

CHILD AND ADOLESCENT HEALTH PROFILE: NEW YORK STATE 1985

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We are especially grateful for the assistance of our expert advisory committee members, who gave precious time and knowledgeable advice. (A list of committee members appears on the inside back cover of this report.) We would also like to thank the 68 representatives from public and private agencies across the state who attended our regional review meetings and helped us to better understand the data needs of local planners and program providers.

We also gratefully acknowledge the staff of the following state and city agencies who provided the information contained in this profile report:

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Department of Motor Vehicles
Department of Social Services
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Division of Substance Abuse Services
Education Department
Office of Mental Health
Office of Mental Retardation and Developmental Disabilities

New York City

Health Department
Human Resources Administration

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6

7

CONTENTS

Page

LISTING OF FIGURES. iv

LISTING OF TABLES. vi

NEW YORK STATE MAP x

INTRODUCTION. xi

OTHER CAHP PRODUCTS. xv

POPULATION CHARACTERISTICS

Population Size 1
Age Distribution 3
Race and Ethnicity 5

SOCIOECONOMIC STATUS

Income and Poverty. 8
Employment 12
Family Structure 14
Parents' Education 16

PROGRAM PARTICIPATION. 18

HEALTH CARE ACCESS

Health Insurance. 27
Prenatal Care. 30
Immunization Status. 34
Dental Status. 36

PREGNANCIES, BIRTHS, AND INFANT HEALTH

Pregnancies and Births 38
Low Birth Weight and Premature Births. 41
Congenital Malformations. 48

Page

ADOLESCENT HEALTH

Adolescent Pregnancy. 49
Substance Abuse. 56

MORBIDITY

Discharge Diagnoses for Hospitalized Children. 60
Lead Poisoning. 63
Cancer. 64
Infectious Diseases. 66
Sexually Transmissible Diseases. 69
AIDS. 72

CHILDREN WITH SPECIAL NEEDS

High-Risk Infant Follow-up. 74
Developmental Disabilities 76
Students with Handicapping Conditions 78
Residential Care. 80

INJURY, ABUSE, AND MALTREATMENT

Abuse and Maltreatment 82
Motor Vehicle Injuries and Deaths 85

MORTALITY

Mortality. 87
Leading Causes of Death 92

REFERENCES. 96

TECHNICAL NOTES. 104

INDEX. 108

LISTING OF FIGURES

Page

Figure 1. Population Profile of Children (0-19 Years) New York State, 1985. 1

Figure 2. Projected Age Distribution New York State, 1985. 3

Figure 3. Race and Ethnic Origin of Children (0-17 Years) 1980. 6

Figure 4. Race and Ethnic Origin of Children (0-17 Years) New York State, 1985. 6

Figure 5. Median Income of Family Households New York State, 1979. 8

Figure 6. Percentage of Children in Poverty by Selected Characteristics New York State, 1969, 1979. 9

Figure 7. Family Structure of Children (0-17 Years) New York State, 1980. 14

Figure 8. Percentage of Births to Mothers with Less Than a High School Education 1985. 16

Figure 9. Number of Children Enrolled in Selected Public Assistance Programs New York State, 1985. 20

Page

Figure 10. Source of Health Insurance Coverage for Children (0-19 Years) New York State, 1985. 27

Figure 11. Percentage of Children (0-19 Years) Without Health Insurance by Income Level New York State, 1985. 28

Figure 12. Entry into Prenatal Care: Percentage of Live Births by Maternal Age New York State, 1985. 30

Figure 13. Percentage of Live Births to Mothers with Late or No Prenatal Care New York State, 1985. 31

Figure 14. Reported Pregnancy Outcomes by Maternal Age New York State, 1985. 38

Figure 15. Premature Births (Gestation <37 Weeks) by Residence, Mother's Age, and Race New York State, 1985. 42

Figure 16. Low Birth Weight Births by Residence, Mother's Age, and Race New York State, 1985. 45

Figure 17. Congenital Malformations Reported Among Children Born in 1983 New York State. 48

Page

Figure 18. Adolescent Pregnancy Rates
New York State, 1985 49

Figure 19. Adolescent Live Birth Rates
New York State, 1985 50

Figure 20. Percentage of Births to Adolescent Mothers
Who Had Previously Been Pregnant or Given Birth
New York State, 1985 54

Figure 21. Level of Substance Use
Among Students (Grades 7-12)
New York State, 1983 57

Figure 22. Lead Poisoning
1985 64

Figure 23. Deaths Attributed to AIDS
Among Children (0-19 Years)
New York State, 1983, 1984, 1985 73

Figure 24. Reasons for Infants' Registration
in the IHAP Program
New York State Excluding New York City
1985 Births 74

Figure 25. Students with Handicapping Conditions
New York State, 1985 78

Page

Figure 26. Children Involved in Indicated Cases
of Child Abuse or Maltreatment
New York State, 1980-1985 82

Figure 27. Children in Indicated Cases
of Abuse or Maltreatment
New York State, 1985 83

Figure 28. Age Distribution of Motor Vehicle Injuries
New York State, 1985 85

Figure 29. Infant Mortality Rates by Race
New York State, 1970-1985 88

12

13

LISTING OF TABLES

Page

Table 1. Children (0-19 Years) 1970, 1980, 1985. 2

Table 2. Children by Age Group 1985. 4

Table 3. Race and Ethnic Origin of Children (0-17 Years) 1980. 7

Table 4. Median Income of Family Households 1979. 10

Table 5. Poverty Status of Families with Children and of Children (0-17) 1979. 11

Table 6. Unemployment among the Resident Civilian Labor Force 1980, 1985. 13

Table 7. Family Structure of Children (0-17 Years) 1980. 15

Table 8. Live Births by Maternal Age and Education 1985. 17

Table 9. Aid to Families with Dependent Children (AFDC) Average Number of Monthly Cases, Children, and Rates 1985. 21

Table 10. Children Receiving Home Relief, by Age 1985. 22

Page

Table 11. Children Receiving Supplemental Security Income, by Age 1986. 23

Table 12. Participation in the WIC and SNAP Nutritional Programs Fiscal Year 1985. 24

Table 13. Children Receiving Food Stamps 1985 Monthly Average. 25

Table 14. Participation in the National School Lunch Program December 1985. 26

Table 15. Medicaid: Children (0-19 Years) Enrolled and Receiving Services, by Age 1985. 28

Table 16. Medicaid: Children (0-20) Enrolled and Receiving Services 1985. 29

Table 17. Early Entry into Prenatal Care by Race: Number and Rate per 100 Live Births 1985. 32

Table 18. Early Entry into Prenatal Care by Maternal Age: Number and Rate per 100 Live Births 1985. 33

Table 19. Percentage of Children Entering School Fully Immunized, by Grade Level 1985-1986. 35

Page

Table 20. Average Number of Decayed, Missing, and Filled Teeth (DMFT) per Child and Percentage Filled, by Child's Age
New York City, 1979-1980. 36

Table 21. Average (Weighted) Number of Decayed, Missing, and Filled Tooth Surfaces (DMFS) per Child and Percentage Filled, by Grade Level and Socioeconomic Status
1979-1980. 37

Table 22. Reported Pregnancies and Outcomes
1985. 39

Table 23. Live Births by Race and Maternal Age
1985. 40

Table 24. Premature Births (Gestation <37 Weeks) Number and Rate per 100 Live Births by Race
1985. 43

Table 25. Premature Births (Gestation <37 Weeks) Number and Rate per 100 Live Births by Maternal Age
1985. 44

Table 26. Low Birth Weight Births (<2,500 Grams) Number and Rate per 100 Live Births by Race
1985. 46

Page

Table 27. Low Birth Weight Births (<2,500 Grams) Number and Rate per 100 Live Births by Maternal Age
1985. 47

Table 28. Reported Adolescent Pregnancies by Maternal Age
1985. 51

Table 29. Live Births among Adolescents by Maternal Age
1985. 52

Table 30. Induced Abortions among Adolescents by Maternal Age
1985. 53

Table 31. Percentage of Births to Adolescents Who Had Previously Been Pregnant or Given Birth
1985. 55

Table 32. Classification of Alcohol Consumption Among Secondary School Students
New York State, 1983. 57

Table 33. Level of Substance Use among Students by Grade
New York State, 1983. 58

Table 34. Type of Substance Use among Students by Grade
New York State, 1983. 58

Table 35. Level of Substance Use among Students by Health Service Area (HSA)
New York State, 1983. 59

16

17

LISTING OF TABLES (continued)

Page

Table 36. Five Most Frequent Hospital Discharge Diagnoses for Children (0-19) by Age and Sex of Child New York State, 1985. 61

Table 37. Hospital Discharges for Children by Selected Primary Diagnoses New York State, 1985. 61

Table 38. Hospital Discharges for Children (0-19 Years) and Rate per 10,000 Children by Selected Diagnoses 1985. 62

Table 39. New Reported Cancer Cases and Rates Among Children Five-Year Average, 1978-1982. 65

Table 40. Incidence of Immunizable Diseases Among Children (0-19 Years) 1985. 67

Table 41. Incidence of Hepatitis and Tuberculosis Among Children (0-19 Years) 1985. 68

Table 42. Reported Cases of Gonorrhea and Syphilis in Children (0-19 Years) 1985. 70

Table 43. Reported Cases of Gonorrhea by Age of Child 1985. 71

Page

Table 44. Cumulative Cases of AIDS March 1983-December 1985. 73

Table 45. Infant Health Assessment Program (IHAP) New York State Excluding New York City 1985. 75

Table 46. Estimated Number of Children with a "Substantial" Developmental Disability by Age 1985. 77

Table 47. Students (5-21 Years) with Handicapping Conditions 1985. 79

Table 48. Children in Residential Care by County of Origin and Age June 1985. 81

Table 49. Suspected Child Abuse and Maltreatment Children (0-17 Years) 1985. 84

Table 50. Motor Vehicle Injuries and Deaths Among Children by Age 1985. 86

Table 51. Infant Mortality Rates by Race 1970-1985. 89

Table 52. Infant, Neonatal, and Post-Neonatal Mortality Three-Year Average, 1983-1985. 90

18

19

Page

Table 53. Mortality by Age
Three-Year Average, 1983-1985. 91

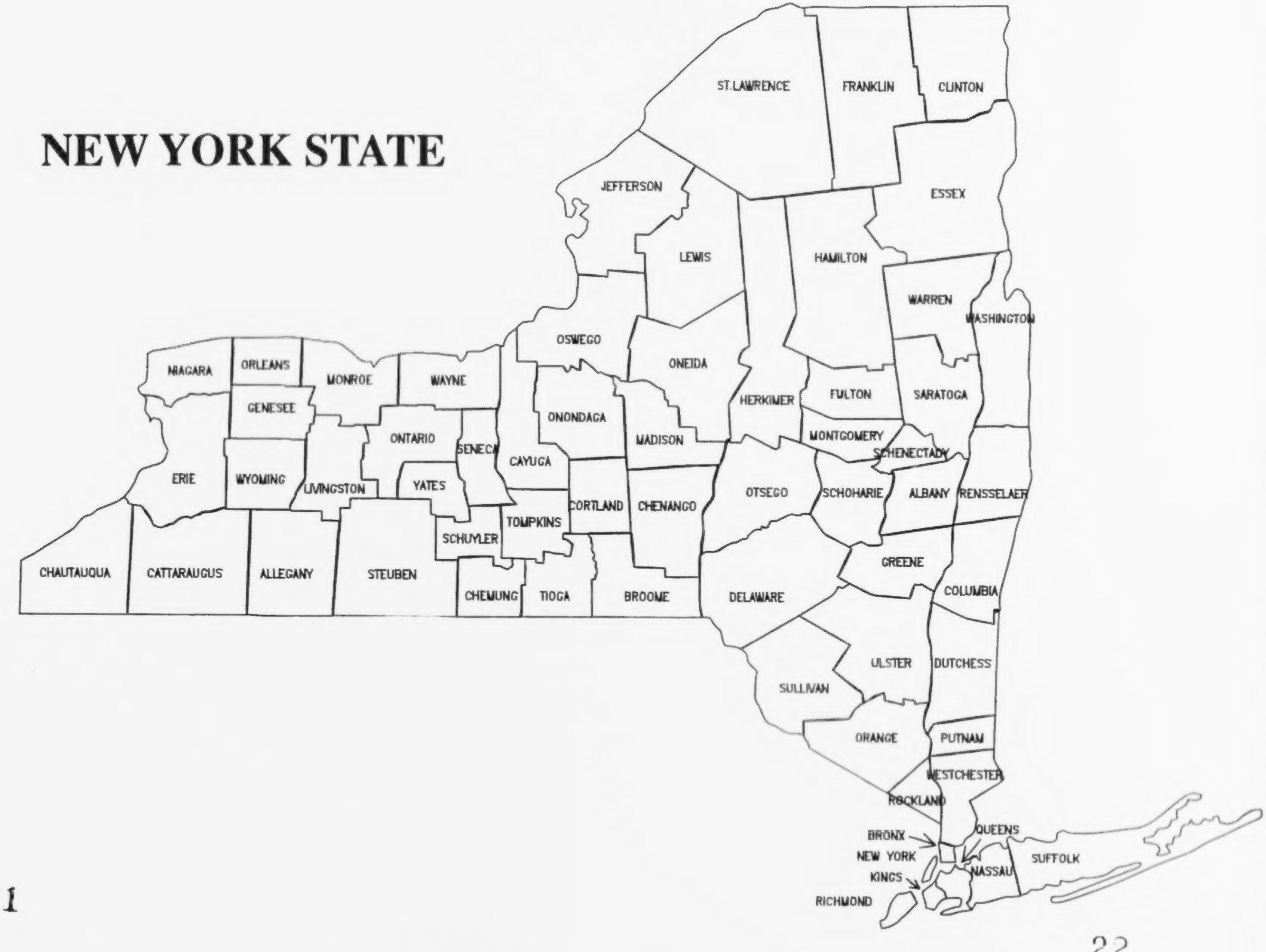
Table 54. Five Leading Causes of Death
for Children by Age
Three-Year Average, 1983-1985. 93

Table 55. Five Leading Causes of Death
for White Children by Age
Three-Year Average, 1983-1985. 94

Table 56. Five Leading Causes of Death
for Nonwhite Children by Age
Three-Year Average, 1983-1985. 94

Table 57. External Causes of Death:
Accidents, Suicides, and Homicides by Age
1985. 95

NEW YORK STATE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NASSAU
SUFFOLK
RICHMOND

21

22

INTRODUCTION

The Child and Adolescent Health Profile (CAHP) Project* was initiated to provide planners, policy makers, and advocates with key health, demographic, and socioeconomic data for New York State and its 62 counties. CAHP is a three-year collaborative project conducted by Welfare Research, Inc., the New York State Council on Children and Families, and the New York State Department of Health. Funding for the project is provided by a grant from the Maternal and Child Health Improvement Project of the United States Department of Health and Human Services.

BACKGROUND

The health and well-being of New York State's 5.6 million infants, children, and youth are the key to its future. The picture of health for New York's children has improved considerably in recent decades, with the near eradication of many infectious diseases and impressive reductions in infant mortality. But while these traditional yardsticks show positive gains, increasingly children's health is compromised by the "new morbidity," exemplified by behavior and learning problems, family stress, environmental contamination, poor dietary habits, and mental health problems. Unlike infectious diseases, problems of the "new morbidity" cannot be prevented by a vaccination or cured by a dose of medication; their causes and cures are rooted in family and community systems.

We have not yet succeeded in eliminating problems of the "new morbidity" targeted during the past decade as major threats to the health and future of our youth. These include such problems as adolescent pregnancy, substance abuse, and venereal disease, as well as the high rate of death and disability among teenagers caused by automobile accidents and violence.

Meanwhile, health care professionals continue to battle the "old morbidity." Cancer, as yet difficult to cure, continues to be one of the leading causes of death for children over one year of age. Providers in New York City also find themselves treating "vanquished" health problems such as parasites, tuberculosis, and nutritional deficiencies, because New York is a port of entry for many children from developing countries.

AIDS, a disease unknown before 1981, has emerged as a serious and growing threat to children's health. In 1985, AIDS was the leading cause of death for nonwhite children aged 1-4 in New York State.

Much remains to be done to ensure the health of our children, both by reducing their exposure to health risks and by increasing their access to high-quality health services. Persistent gaps among racial and ethnic groups with regard to health, economic, and social status are yet to be eliminated.

Responses to these health problems will emerge from a health care arena that is also undergoing change. In contrast to the 1960s and early 1970s, when policy concerns emphasized resource development and more equitable distribution, policy in the 1970s and 1980s has increasingly been guided by cost containment *(Miller, Fine, Adams-Taylor, and Schorr, 1986)*. Despite congressional restoration of program funding that was significantly reduced during the early Reagan administration, important programs (such as Medicaid) have not reached their previous service levels, much less kept pace with the needs of the increasing number of children in poverty. Attempts to increase funding for child health programs will undoubtedly compete with efforts to reduce the nation's huge budget deficit.

**The Child and Adolescent Health Profile Project addresses the health status of children from birth to age 19. The term "children" refers to the entire age group unless otherwise specified (for example, when used together with the terms "infants" and "adolescents"). The terms "adolescents," and "teenagers," and "youth" are used interchangeably.*

INTRODUCTION (continued)

In this environment, the challenge facing policy makers and program planners is to use health, socioeconomic, and demographic data to identify current and impending problems and develop effective interventions for children at risk. Program outcomes must be assessed so that scarce resources can be used to their greatest benefit. More than ever, reliable data are crucial for informed decision making.

PROFILE DEVELOPMENT

One of the first steps in developing the profile was to identify and select the key indicators of child and adolescent health. To assist in this process, project staff convened an expert advisory committee composed of members with expertise in pediatrics and adolescent medicine, child health programs and policy, and the development of child health status reports. Based on the advisors' recommendations and a thorough literature review, staff developed a long "wish list" of indicators. This list was then narrowed by applying five criteria adapted from the University of North Carolina for its Child Health Outcomes project:

- Considered a valid measure of health status (with "health" broadly defined).
- Regarded by experts in the field as reflecting important health and/or policy concerns.
- Understandable to and considered significant by the public and professionals.
- Related to a disease or condition, or death, that is preventable or whose incidence could be greatly reduced.
- Measured by data that are relatively easy to obtain, affordable, reliable, and comparable among counties.

In addition to health status measures, socioeconomic and demographic data were also identified and selected. Acccordingly, the data included in this profile report provide information that can be used for policy making, planning, resource allocation, and monitoring.

The indicators selected include traditional measures such as infant mortality, low birth weight, and poverty status. We also compiled data that have not been widely published, including information on new mothers' educational status, participation in a new program for high-risk babies (the Infant Health Assessment Program), data from the first cohort included in the new congenital malformations registry, and data on AIDS cases.

In general, population-based outcome data were preferred for measuring health status; however, if such data were unavailable and the problem was considered significant, other sources of data were sought. For example, although lead poisoning was identified by the advisory committee as an important problem, data about the prevalence of lead poisoning in New York are unavailable. Therefore, data on the number of children screened for elevated blood lead levels and the percentage whose tests were positive were included in the profile report. Although these findings are not optimal for planning, they do shed some light on the extent of an important preventable condition and the scope of New York's screening activities in 1985. Similarly, hospital discharge data were included in this profile because they were the best available data on selected chronic and acute conditions.

PROFILE PRESENTATION

This report contains over 40 indicators grouped into the following 10 categories:

- Population Characteristics
- Socioeconomic Status

- Program Participation
- Health Care Access
- Pregnancies, Births, and Infant Health
- Adolescent Health
- Morbidity
- Children with Special Needs
- Injury, Abuse, and Maltreatment
- Mortaltiy

The data on population size and composition, and age and geographic distribution, found at the beginning of the report, are essential for planning. The most reliable population data derive from the 1980 population census, and they are used most often. Population projections made by the New York State Department of Commerce for 1985 are used where it was decided that more recent data were preferable, even if less reliable.

Data on socioeconomic status and living arrangements are included in this report for several reasons: first, because poverty status is a significant indicator of the well-being of our society; second, because poverty and disadvantage in our society are closely associated with poor health outcomes; and third, because socioeconomic data suggest the size of the population likely to be eligible for existing or planned public health programs. Data on participation in selected public programs (e.g., AFDC and food stamps) are included to provide additional socioeconomic data.

The kinds of data collected for this report included census, survey, registry, administrative, estimation, and projection. These data were collected from a wide variety of sources including one federal agency, ten state agencies, and two New York City agencies.

Format. Most of the profile indicators in the report are introduced with a narrative that contains a definition of the indicator, an explanation of its significance for health, and important relationships between the indicator and other factors such as race/ethnicity, age, and poverty. In some cases the source of the data is described and, if important, limitations of the data are noted. The U.S. Public Health Service 1990 objectives for the nation, and New York's status vis-a-vis these objective, are also presented for selected indicators. Additional key information such as national data, trends, research findings, or highlights from the tables are set off by bullets at the end of the narratives.

Some of the state-level indicator data are displayed in graphs. These data may highlight regional differences in the state or present detail about an indicator at the state level that could not be presented at the individual county level because of space limitations.

Data for most of the indicators are displayed in tables at three levels: (1) for the state as a whole, (2) for New York City and the "rest of the state," and (3) for individual counties. Most of the tables present both numbers and rates. Numbers reveal the absolute size of the problem while rates allow for comparisons among counties or among subgroups of the population, except in counties where the rates are based on small numbers. (See Technical Note A located at the end of this report for an explanation of small number variation.) Rates published in subsequent profile reports can be compared with 1985 rates to monitor the direction and extent of change in rates over time. The base used for calculating all rates presented in this report was the 1985 population projections published by the New York State Department of Commerce.

Since the various sources accessed in compiling this profile sometimes use definitions or geographic areas or have limitations that may not be readily understandable to readers, we have provided lettered technical notes at the end of the report to give explanations, definitions, or other information as needed.

INTRODUCTION (continued)

For the most part, data are presented for the calendar year 1985. (A report containing 1986 data is scheduled for release in 1988.) Although some more recent data were available for certain indicators, we decided to limit our data sets in order to provide the most comprehensive view of children's health and economic status for a single year. Exceptions to use of the calendar year were made for data given only by fiscal year or when the only data available were derived from a survey conducted in a different year. Five-year and three-year averages were used to increase the stability of cancer and mortality data, where small numbers could cause large fluctuations in rates and rankings.

Counties are the smallest geographic area for which data are presented; however, some data available only for multicounty regions or at the state level are included as well. Subcounty data were omitted because the inclusion of additional data would have made the size of this report unmanageable, and because the variety of subcounty areas used by different agencies (e.g., city, zip code area, census tract) would have made comparison impossible.

Where the data allow, and as appropriate, data are grouped into the following five-year age groups: 0-4, 5-9, 10-14, and 15-19. Data are displayed by race/ethnicity and gender if such relationships are important and if the data are available.

Recognizing that the profile will not serve all data needs, the Child and Adolescent Health Profile Project is developing a resource directory that will contain information about the data sets used to develop this profile, so that readers can determine whether the information they want is collected and how it can be obtained (see page xv, Other CAHP Products).

Data Limitations. This profile report contains a wealth of information about important health and social indicators, but it does not cover every area of interest. It does not, for example, include any information on physical or emotional well-being, because the state's data sources are problem-oriented. It also reflects gaps in the availability of data about health problems, most notably those associated with the "new morbidity." Reliable data, for example, are not available about mental health or nutrition (including eating disorders) nor about risk-taking behaviors among teenagers, such as cigarette smoking, forced and/or unprotected sexual intercourse, and suicide attempts. Data about the rates of handicapping conditions among children below school age are also unavailable. Moreover, the best data that could be obtained about the number of children in New York State who are mentally retarded or developmentally disabled were estimates prepared by the Office of Mental Retardation and Developmental Disabilities using prevalence rates of the five categorical conditions (epilepsy, mental retardation, autism, cerebral palsy, and neurological impairments).

Data about the incidence and prevalence of acute and chronic diseases and conditions are limited to reportable diseases. Similarly, data about nonfatal injuries are unavailable with the exception of those caused by motor vehicle accidents.

Another gap that we encountered was the lack of refinement in ethnic/racial classifications in available data sets. This presents particular problems if these indicators are to be used for planning. Some data are available only for the groups "whites" and "nonwhites." A "Hispanic" category, if reported, seldom distinguishes among the widely disparate ethnic groups comprising the Hispanic population, and data about other ethnic groups are generally unavailable.

Since identifying gaps is the first step in filling them, we can hope that better data will be available for subsequent profiles.

OTHER CAHP PRODUCTS

PUBLICATIONS IN PRINT

- *The Child and Adolescent Health Profile: Annotated Bibliography (1985)*

This bibliograpy is intended as a reference for professionals who are interested in compiling and summarizing the key dimensions of children's health. The publications reviewed in this bibliography cover such topics as current child health issues, child health indicators and health status measures, child health profiles, and health indexes. Almost all of the materials reviewed were published in the 1980s. Earlier publications were reviewed if they were considered to be significant contributions to the field. Cost is $3.50.

FORTHCOMING PUBLICATIONS

- *The Child and Adolescent Health Profile: Resource Directory*

The resource directory will contain information about the data sets that were used in compiling the 1985 profile report. Entries for each data source will include agency source, method by which the data are collected, frequency of data collection, when reports are released to the public, report format, data limitations, and a contact person for questions and data requests.

- *The Child and Adolescent Health Profile: New York State 1986*

This report will contain updated data and incorporate selected improvements recommended by users of the 1985 profile.

- *The Child and Adolescent Health Profile: Replication Manual.*

This manual will be designed for professionals interested in developing a similar health profile in other states. The guide will document the steps and key decisions involved in profile development. Technical aspects of profile preparation will also be described, including computer hardware and software used. Computer programs written expressly for this project will be available on request.

Copies of CAHP publications can be obtained from the

Publications Office
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112 State Street, 10th floor
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> *In intensity of feeling...and not in statistics, lies the power to move the world. But by statistics must this power be guided if it would move the world aright.*
>
> *Charles Booth*
> *1902*

POPULATION SIZE

Statistics on population and demographic characteristics, such as size, age distribution, and race and ethnic background, are important for state and local planning and policy making. Population figures are necessary for developing and comparing incidence rates for various health indicators. Comparisons of such indicators are useful for identifying and monitoring health needs within a community, targeting services to areas with the greatest need, and evaluating the effectiveness of interventions. Figures on demographic characteristics such as age and geographic distribution are necessary for assessing the current and future needs of particular groups within the population.

In considering the state's child and adolescent population as a whole, demographers are primarily interested in broad trends: growth or decline and geographic shifts. Population size per se is important in determining the significance of incidence rates. Since rates in communities with a small number of events or a small population base are subject to wide fluctuations due to chance alone, inference about the significance of and reasons for rate changes in such communities should be made with caution (see Technical Note A).

- In 1970, there were 6,440,601 children (0-19 years) in New York State, and in 1980, there were 5,325,435 — a decline of 17 percent. Between 1980 and 1990 it is expected that the number will decline by another 11 percent (*Table 1*).

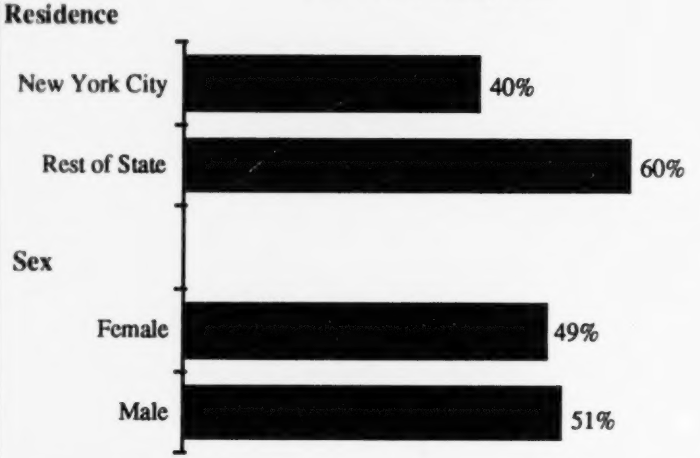
- Between 1980 and 1985, the projected child population loss in counties outside New York City exceeded that within the five boroughs. During these years, it is projected that New York City lost 3 percent of its child population, as compared with 11 percent in the rest of the state (*derived from Table 1*).

- In 1970, 35 percent of the total New York State population consisted of children under the age of 20. This proportion dropped to 30 percent in 1980 and is expected to drop by another 2 percent by 1985. Children represented 32 percent of the national population in 1980, down from 38 percent in 1970 (*United States Department of Commerce, Bureau of the Census [Census Bureau], 1982; Table 1*).

- According to projections for 1985, 40 percent of the state's youth resided in New York City and 60 percent lived in the rest of the state *(Figure 1)*.

Figure 1

Projected Population Profile of Children (0-19 Years) New York State, 1985



Source: New York State Department of Commerce, 1985.

Table 1

CHILDREN (0-19 YEARS)
1970, 1980, 1985[1]

County	1970		1980		1985[1]	
	Number	% of Total Population	Number	% of Total Population	Number	% of Total Population
New York State	6,440,601	35%	5,325,435	30%	4,895,805	28%
New York City	2,474,072	31	1,987,796	28	1,937,410	27
Bronx	512,807	35	385,305	33	372,989	31
Kings	899,255	35	705,935	32	683,081	30
New York	372,535	24	289,970	20	292,927	20
Queens	577,716	29	492,181	26	479,229	25
Richmond	111,759	38	114,405	32	109,178	29
Rest of State	3,966,529	38	3,337,639	32	2,959,395	28
Albany	100,590	35	82,425	29	74,537	26
Allegany	19,355	42	19,182	37	17,385	34
Broome	82,682	37	65,088	30	57,776	27
Cattaraugus	32,236	39	29,160	34	26,978	31
Cayuga	30,020	39	26,289	33	23,603	30
Chautauqua	54,639	37	46,366	32	41,847	29
Chemung	39,668	39	31,446	32	27,665	29
Chenango	18,590	40	16,938	34	15,187	30
Clinton	30,603	42	27,668	34	24,599	30
Columbia	18,546	36	17,895	30	16,339	26
Cortland	18,044	39	16,923	35	15,022	31
Delaware	16,883	38	15,295	33	13,378	29
Dutchess	82,466	37	78,017	32	72,179	28
Erie	418,320	38	308,559	30	267,623	27
Essex	13,446	39	11,501	32	9,863	27
Franklin	18,443	42	15,819	35	13,216	31
Fulton	18,682	35	17,582	32	16,222	29
Genesee	23,388	40	20,072	34	17,795	30
Greene	11,443	35	12,299	30	10,910	27
Hamilton	1,634	35	1,490	30	1,233	25
Herkimer	24,884	37	21,659	32	19,321	29
Jefferson	34,840	39	30,191	34	27,346	31
Lewis	10,266	43	9,246	37	8,134	33
Livingston	21,213	39	19,524	34	18,216	31
Madison	26,768	43	23,895	37	21,995	33
Monroe	268,203	38	219,037	31	204,652	29
Montgomery	18,471	33	15,511	29	14,168	27
Nassau	545,329	38	386,421	29	326,669	25
Niagara	91,544	39	72,172	32	61,384	28
Oneida	102,942	38	80,342	32	71,760	28
Onondaga	183,867	39	147,927	32	133,916	29
Ontario	31,104	39	28,856	32	26,262	29
Orange	84,361	38	89,057	34	86,082	31
Orleans	14,808	40	13,174	34	11,633	30
Oswego	41,940	42	40,984	36	38,715	32
Otsego	20,511	37	18,599	31	17,486	29
Putnam	23,509	41	26,956	35	23,537	29
Rensselaer	57,405	38	49,053	32	44,931	30
Rockland	96,427	42	89,207	34	76,612	29
St. Lawrence	47,226	42	41,205	36	37,021	33
Saratoga	49,340	41	53,237	35	48,574	30
Schenectady	56,335	35	43,377	29	38,712	26
Schoharie	9,784	40	10,494	35	9,745	32
Schuyler	6,698	40	6,023	34	5,106	29
Seneca	12,627	36	10,657	32	9,110	29
Steuben	38,939	39	32,901	33	28,708	29
Suffolk	477,192	42	453,167	35	386,311	29
Sullivan	18,205	35	19,335	30	17,928	26
Tioga	20,067	43	17,995	36	15,286	31
Tompkins	28,646	37	27,136	31	27,271	30
Ulster	52,339	37	48,218	30	43,646	27
Warren	19,289	39	18,334	33	16,213	29
Washington	21,214	40	18,808	34	16,621	30
Wayne	31,484	40	29,213	35	26,903	31
Westchester	306,848	34	245,375	28	216,744	25
Wyoming	14,492	38	13,429	34	12,236	30
Yates	7,734	39	6,910	32	6,088	28

[1] Projected.

Note: Percentages for years and numbers for 1985 may not sum due to rounding.

Sources: U.S. Department of Commerce, Bureau of the Census, 1973;
U.S. Department of Commerce, Bureau of the Census, 1982;
New York State Department of Commerce, State Data Center, 1985.

AGE DISTRIBUTION

Although few health problems are unique to a particular age group, many are more common at one stage of childhood than at another. For example, infants suffer primarily from the ill effects of pregnancy-related problems, and young children tend to be victims of accidents and suffer from certain leukemias, while adolescents tend to experience problems (such as pregnancy, drug dependency, and motor vehicle accidents) that are the result of risk-taking behaviors.

Statistics on death rates and hospital discharges indicate that infants and adolescents have higher rates of health problems than young children, who, according to these indicators, tend to enjoy relatively good health.

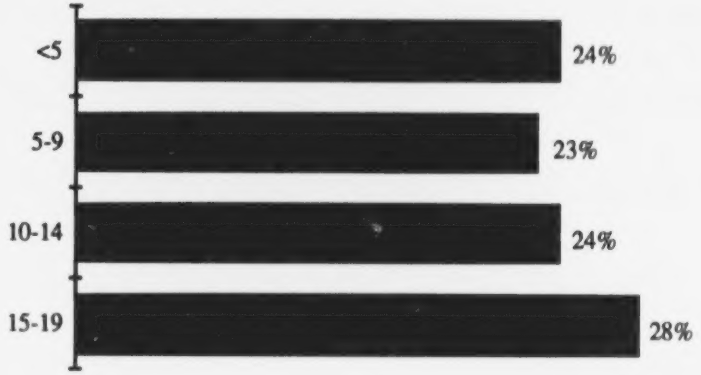
The child population may be seen as waves of cohorts (children within the same age group) that rise and fall depending on such factors as fertility, migration, and mortality. The relative concentrations of children in various age groups indicate the types of health problems a community is likely to encounter and the services that will likely be needed.

- According to 1985 population projections, the largest cohort of children in New York State was adolescents 15-19 years of age. The relatively low fertility rates of the 1970s resulted in smaller cohorts of children in age groups 5- 9 and 10-14; but an increase in the birth rate in the early 1980s reversed the downward trend in the child population. Children born in the early 1980s (0-4 age cohort) are sometimes referred to as the "baby boom echo" *(New York State Council on Children and Families [CCF], 1988)*.

- In 1985, there were an estimated 4.9 million children (0-19 years) in New York State; 24 percent were between the ages of 0 and 4; 23 percent were 5- 9 years old; 24 percent, 10-14 years old; and 28 percent, 15-19 years old *(Table 2)*.

Figure 2

Projected Age Distribution
New York State, 1985



Note: Percentages do not sum to 100 due to rounding.

Source: New York State Department of Commerce, 1985.

38

39

Table 2

CHILDREN BY AGE GROUP
1985

	0 - 4		5 - 9		10 - 14		15 - 19	
County	Number	%	Number	%	Number	%	Number	%
New York State	1,199,232	24%	1,144,923	23%	1,161,536	24%	1,390,114	28%
New York City	496,537	26	466,543	24	451,763	23	522,567	27
Bronx	94,174	25	90,953	24	87,921	24	99,941	27
Kings	183,006	27	170,351	25	157,915	23	171,809	25
New York	74,473	25	66,980	23	63,966	22	87,508	30
Queens	117,945	25	112,586	23	115,535	24	133,163	28
Richmond	26,937	25	25,670	24	26,425	24	30,146	28
Rest of State	702,695	24	678,380	23	710,773	24	867,547	29
Albany	17,401	23	15,881	21	16,535	22	24,720	33
Allegany	3,608	21	3,706	21	3,747	22	6,324	36
Broome	13,722	24	12,411	21	13,120	23	18,523	32
Cattaraugus	6,592	24	6,539	24	6,441	24	7,406	27
Cayuga	5,932	25	5,722	24	5,763	24	6,186	26
Chautauqua	10,283	25	9,859	24	9,990	24	11,715	28
Chemung	6,766	24	6,617	24	6,523	24	7,759	28
Chenango	3,812	25	3,829	25	3,685	24	3,861	25
Clinton	5,860	24	5,615	23	5,486	22	7,638	31
Columbia	4,176	26	3,770	23	4,167	26	4,226	26
Cortland	3,341	22	3,358	22	3,271	22	5,052	34
Delaware	3,086	23	3,152	24	3,111	23	4,029	30
Dutchess	16,976	24	16,258	23	16,985	24	21,960	30
Erie	63,661	24	59,997	22	64,245	24	79,720	30
Essex	2,252	23	2,382	24	2,525	26	2,704	27
Franklin	3,305	25	2,992	23	3,150	24	3,769	29
Fulton	3,821	24	3,977	25	4,198	26	4,226	26
Genesee	4,443	25	4,124	23	4,472	25	4,756	27
Greene	2,455	23	2,511	23	2,747	25	3,197	29
Hamilton	293	24	294	24	318	26	328	27
Herkimer	4,723	24	4,604	24	5,058	26	4,936	26
Jefferson	6,956	25	6,710	25	6,791	25	6,889	25
Lewis	2,054	25	2,141	26	1,986	24	1,953	24
Livingston	4,067	22	3,898	21	3,937	22	6,314	35
Madison	4,711	21	4,424	20	4,382	20	8,478	39
Monroe	51,815	25	44,747	22	46,310	23	61,780	30
Montgomery	3,408	24	3,404	24	3,624	26	3,732	26
Nassau	75,268	23	75,771	23	81,207	25	94,423	29
Niagara	15,167	25	14,614	24	14,960	24	16,643	27
Oneida	17,721	25	16,344	23	17,188	24	20,507	29
Onondaga	33,677	25	29,299	22	30,026	22	40,914	31
Ontario	6,491	25	6,063	23	6,148	23	7,560	29
Orange	20,977	24	21,245	25	21,015	24	22,845	27
Orleans	2,852	25	2,744	24	2,927	25	3,110	27
Oswego	8,836	23	9,284	24	9,012	23	11,583	30
Otsego	3,832	22	3,625	21	3,462	20	6,567	38
Putnam	5,909	25	5,549	24	5,883	25	6,196	26
Rensselaer	10,443	23	9,774	22	10,587	24	14,127	31
Rockland	18,326	24	18,506	24	19,005	25	20,775	27
St. Lawrence	7,807	21	8,174	22	8,214	22	12,826	35
Saratoga	11,557	24	11,489	24	11,837	24	13,691	28
Schenectady	9,336	24	8,911	23	9,315	24	11,150	29
Schoharie	1,938	20	1,880	19	2,160	22	3,767	39
Schuyler	1,259	25	1,281	25	1,315	26	1,251	25
Seneca	2,264	25	2,076	23	2,335	26	2,435	27
Steuben	7,262	25	7,171	25	7,143	25	7,132	25
Suffolk	86,153	22	91,339	24	99,060	26	109,759	28
Sullivan	4,519	25	4,319	24	4,559	25	4,531	25
Tioga	4,095	27	3,706	24	3,648	24	3,837	25
Tompkins	5,298	19	4,413	16	4,873	18	12,687	47
Ulster	10,843	25	9,864	23	10,289	24	12,650	29
Warren	3,966	24	3,778	23	4,095	25	4,374	27
Washington	3,773	23	3,990	24	4,332	26	4,526	27
Wayne	6,819	25	6,556	24	6,684	25	6,844	25
Westchester	52,140	24	49,188	23	51,416	24	64,000	30
Wyoming	3,159	26	3,060	25	3,013	25	3,004	25
Yates	1,504	25	1,448	24	1,496	25	1,640	27

Note: Percentages may not sum to 100 due to rounding.

Source: New York State Department of Commerce, State Data Center, 1985.

RACE AND ETHNIC ORIGIN

Because of the substantial differences in health status and access to services between white and nonwhite children (due primarily to economic disparities), data on race and ethnic composition are particularly useful for assessing need, as well as for designing and locating culturally appropriate programs. Among the most distressing disparities are those in the areas of maternal and infant health. Nonwhite women in New York State are more than twice as likely as white women to receive late or no prenatal care. They are also twice as likely to deliver a baby weighing less than 2,500 grams. Similarly, infant deaths are approximately 75 percent higher among nonwhites than whites *(New York State Department of Health [DOH], Bureau of Biostatistics, 1986).*

Disparities in health status continue through adolescence. Approximately one-third of all black children are estimated to suffer some kind of nutritional deficit, as compared with less than 15 percent of white children *(United States Department of Health and Human Services [DHHS], 1981).* Further, toxic levels of blood lead are found in 12 percent of preschool black children nationwide but in only 0.4 percent of white children. Homicide claims four times as many nonwhite youths as white youths *(Randolph & Rivers, 1985).*

Most of these and other disparities in health status are associated with economic disparities that exist between white and nonwhite children. Children who live in poverty not only are at increased risk of health problems but also have limited access to health services *(Petit & Overcash, 1983; Starfield, 1982).* In 1980, fully 38 percent of all black children and 45 percent of all Hispanic children in New York State were living in poverty, as compared with 10 percent of all white children *(Census Bureau, 1982).*

42

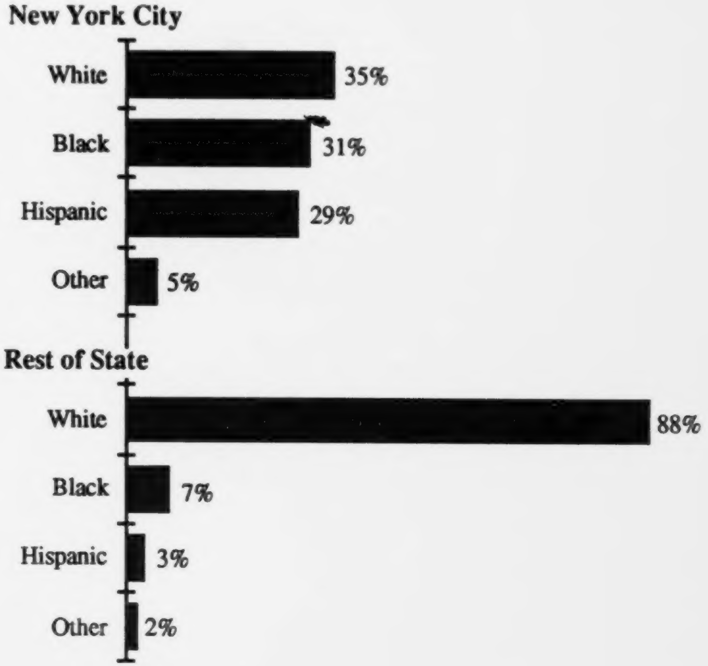
- Between 1970 and 1980, the number of white children in New York State declined by 1.3 million. At the same time, the number of black children remained stable and the number of Hispanic children and children from other racial groups increased. As a result, the proportion of white children in the state declined from 76 percent in 1970 to 68 percent in 1980, while corresponding gains were spread among children who were black, Hispanic, or from other racial/ethnic groups *(Census Bureau, 1982).*

- The child population in New York City is more racially and ethnically diverse than the child population in the rest of the state. In 1980, the vast majority (88%) of all children living in counties outside New York City were non-Hispanic white. Only 7 percent were non-Hispanic black, 3 percent were Hispanic, and 2 percent were from other racial groups. In New York City the child population was more evenly distributed among whites (35%), blacks (31%), and Hispanics (29%). The remaining 5 percent were children of other races — primarily Asian *(Figure 3).*

43

Figure 3

Race and Ethnic Origin[1] of Children (0-17 Years) 1980

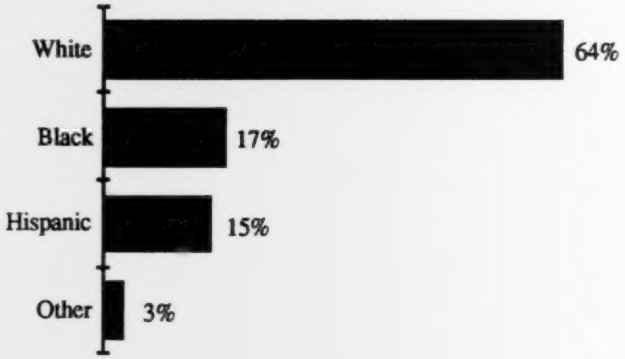


[1] See Table 3 for definitions of race and ethnic groups.

Sources: U.S. Department of Commerce, Bureau of the Census, 1982;
New York State Department of Commerce, State Data Center, 1983.

Figure 4

Race and Ethnic Origin[1] of Children (0-17 Years) New York State, 1985



[1] See Table 3 for definitions of race and ethnic groups.

Note: Percentages do not sum to 100 due to rounding.

Source: New York State Council on Children and Families, 1988.

Table 3

RACE AND ETHNIC ORIGIN[1] OF CHILDREN (0-17 YEARS) 1980

County	White[2]		Black[2]		Hispanic[3]		Other[4]	
	Number	%	Number	%	Number	%	Number	%
New York State	3,187,158	68 %	769,405	16 %	597,448	13 %	133,852	3 %
New York City	624,741	35	551,225	31	503,434	29	86,067	5
Bronx	61,402	18	118,228	35	153,310	45	8,770	3
Kings	211,508	33	242,582	38	157,926	25	19,499	3
New York	61,030	24	69,004	27	103,278	41	19,932	8
Queens	207,996	48	111,852	26	81,700	19	34,926	8
Richmond	82,805	81	9,559	9	7,220	7	2,940	3
Rest of State	2,562,417	88	218,180	7	94,014	3	47,785	2
Albany	60,291	87	6,746	10	968	1	1,160	2
Allegany	14,413	98	44	0	52	0	130	1
Broome	53,192	96	1,069	2	514	1	770	1
Cattaraugus	24,524	95	246	1	136	1	778	3
Cayuga	22,606	97	476	2	156	1	165	1
Chautauqua	38,232	95	701	2	960	2	370	1
Chemung	25,713	94	1,257	5	279	1	232	1
Chenango	15,148	98	69	0	100	1	83	1
Clinton	22,089	96	346	2	255	1	215	1
Columbia	15,074	93	750	5	207	1	130	1
Cortland	13,190	98	74	1	140	1	99	1
Delaware	12,421	98	110	1	108	1	88	1
Dutchess	59,585	87	5,465	8	1,958	3	1,455	2
Erie	224,040	83	35,851	13	5,838	2	4,409	2
Essex	10,254	99	18	0	73	1	42	0
Franklin	12,791	93	25	0	68	0	812	6
Fulton	15,436	97	194	1	135	1	113	1
Genesee	17,087	95	436	2	145	1	290	2
Greene	10,217	94	368	3	187	2	62	1
Hamilton	1,346	99	0	0	4	0	9	1
Herkimer	18,851	99	30	0	92	0	75	0
Jefferson	26,647	98	99	0	150	1	207	1
Lewis	8,303	99	6	0	37	0	32	0
Livingston	15,590	97	176	1	126	1	117	1
Madison	18,847	98	99	1	124	1	109	1
Monroe	152,509	80	28,804	15	7,152	4	3,363	2
Montgomery	13,090	94	69	0	696	5	95	1
Nassau	286,006	84	31,886	9	14,422	4	6,714	2
Niagara	57,168	90	4,410	7	658	1	1,108	2
Oneida	65,951	93	3,008	4	1,042	1	687	1
Onondaga	111,482	87	12,020	9	1,740	1	2,867	2
Ontario	24,057	96	506	2	396	2	194	1
Orange	67,895	86	5,909	7	4,472	6	962	1
Orleans	10,797	91	733	6	167	1	112	1
Oswego	34,686	98	114	0	211	1	282	1
Otsego	14,182	98	72	0	121	1	120	1
Putnam	23,683	96	154	1	509	2	204	1
Rensselaer	39,654	94	1,521	4	370	1	423	1
Rockland	67,280	84	6,189	8	4,550	6	2,230	3
St. Lawrence	32,723	98	39	0	190	1	320	1
Saratoga	46,553	98	386	1	348	1	350	1
Schenectady	35,549	93	1,750	5	494	1	604	2
Schoharie	7,780	97	65	1	112	1	54	1
Schuyler	5,345	99	15	0	20	0	36	1
Seneca	9,123	97	97	1	93	1	64	1
Steuben	29,014	98	295	1	148	0	253	1
Suffolk	349,247	86	27,147	7	23,654	6	5,676	1
Sullivan	14,440	85	1,400	8	926	5	221	1
Tioga	15,989	98	97	1	117	1	116	1
Tompkins	17,255	92	762	4	311	2	504	3
Ulster	38,198	90	1,894	4	1,703	4	575	1
Warren	16,039	98	83	1	149	1	91	1
Washington	16,719	99	31	0	97	1	52	0
Wayne	24,727	93	1,187	4	369	1	181	1
Westchester	161,496	74	32,808	15	15,877	7	7,275	3
Wyoming	11,996	99	28	0	40	0	74	1
Yates	5,897	98	46	1	48	1	26	0

[1] As reported in response to questions about race and ethnic origin on the 1980 census.

[2] Not of Spanish origin.

[3] Of Spanish origin.

[4] "Other" includes individuals who are not categorized as black or white and who are not of Spanish origin. In New York State, this population is predominantly Asian or Native American.

Note: Percentages may not sum to 100 due to rounding.

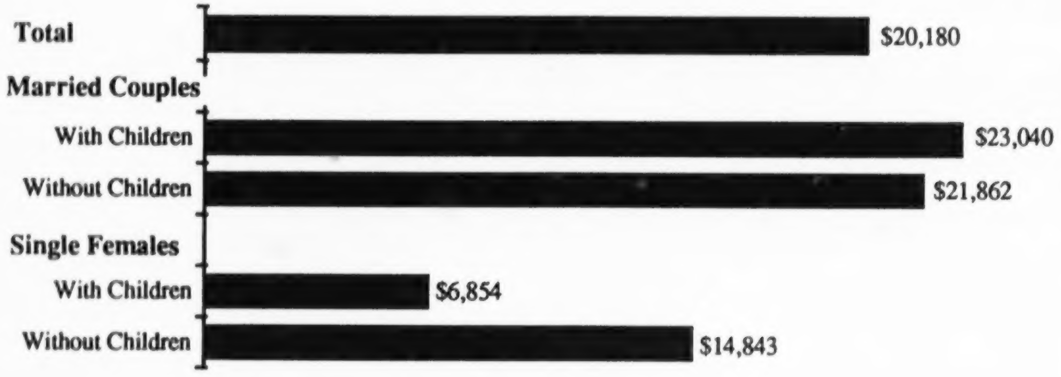
Sources: U.S. Department of Commerce, Bureau of the Census, 1982;
New York State Department of Commerce, New York State Data Center, 1983.

INCOME AND POVERTY

Poverty is the single most powerful predictor of poor health among children (*DHHS, 1981*). Poverty is associated with poor nutrition, substandard housing, disruptive social environment, and lack of health information (*Randolph & Rivers, 1985*). In addition, children in poverty have limited access to quality health care. Poor children are less likely to have health insurance coverage than children in families above the poverty level and are less likely to receive preventive care or immediate treatment of health problems (*Berk, Bernstein, & Taylor, 1983; Blendon, Aiken, Kirkman-Liff, & Murphy, 1986; Signalhealth, 1986*). Thus, poor children are more likely to become ill, suffer adverse consequences from illness, and die than children with greater economic resources (*Starfield, 1982*).

Figure 5

Median Income of Family Households
New York State, 1979



Source: U.S. Department of Commerce, Bureau of the Census, 1983.

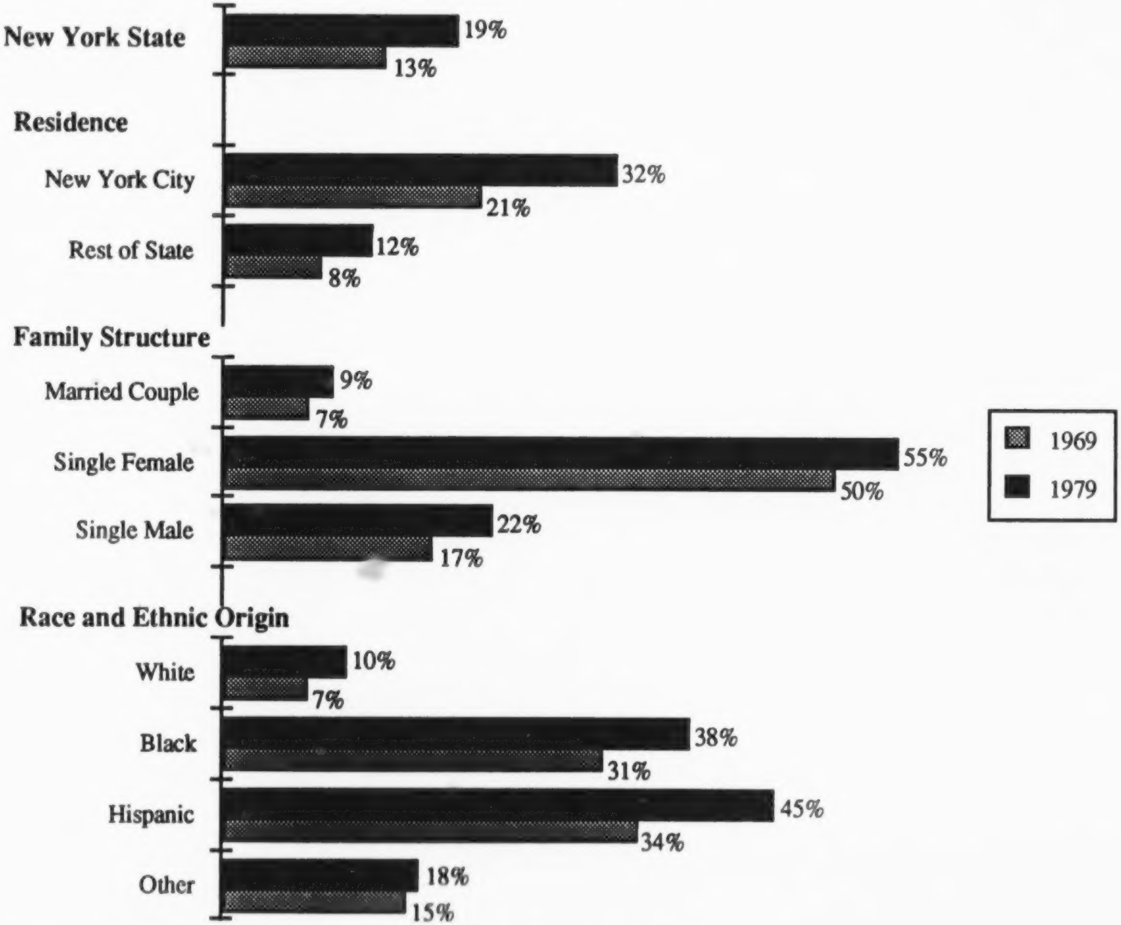
- In 1985, approximately one of every four children in New York State (1.2 million) was living in poverty (see Technical Note C). In the United States, the poverty rate among children was approximately one in five *(CCF, 1988*).

- The median income of New York State households with children in 1979 was $19,985, a decrease from $20,592 in 1969 (adjusting for inflation). The decline in median income occurred primarily in New York City (*CCF, 1988)*.

- In 1979, the poverty rate among children living in New York City (31.8 per 100) was nearly three times the rate for children living in the rest of the state (11.3 per 100). Higher percentages of Hispanic and black children lived in poverty (45% and 38% respectively) than white children (10%) (*CCF, 1988*).

Figure 6

Percentage of Children in Poverty
by Selected Characteristics
New York State, 1969, 1979



Source: U.S. Department of Commerce, Bureau of the Census, 1973, 1983.

Table 4

MEDIAN INCOME OF FAMILY HOUSEHOLDS
1979

County	All Family Households	Married Couples		Single Females	
		With Children	Without Children	With Children	Without Children
New York State	$20,180	$23,040	$21,862	$6,854	$14,843
New York City	16,818	20,222	20,849	5,965	13,632
Bronx	13,163	17,816	17,905	5,189	12,206
Kings	14,664	18,235	18,197	5,585	12,545
New York	16,326	18,938	23,590	6,005	12,033
Queens	20,506	21,994	22,704	8,413	16,913
Richmond	23,842	25,695	25,626	7,890	18,112
Rest of State	22,015	24,440	22,350	10,375	17,772
Albany	21,293	24,009	22,112	8,467	16,407
Allegany	16,203	17,750	16,228	6,062	12,021
Broome	19,712	22,260	19,625	8,122	15,208
Cattaraugus	16,891	19,144	16,601	7,554	13,377
Cayuga	18,473	20,427	18,577	7,603	14,879
Chautauqua	17,561	19,936	17,250	6,721	13,153
Chemung	18,040	20,255	18,421	6,544	13,353
Chenango	16,432	18,314	16,738	8,379	12,197
Clinton	16,386	18,219	16,124	7,126	13,704
Columbia	17,299	19,758	17,000	7,530	12,239
Cortland	17,006	19,244	17,061	7,383	14,549
Delaware	16,072	17,500	16,353	7,247	11,455
Dutchess	23,123	26,072	22,644	9,200	16,067
Erie	20,711	23,370	21,482	6,798	15,193
Essex	16,271	18,507	16,041	6,703	12,458
Franklin	14,966	17,940	14,285	8,112	11,746
Fulton	16,536	18,451	16,719	6,997	12,771
Genesee	20,376	22,006	20,353	8,513	17,253
Greene	16,503	19,476	16,061	7,475	13,067
Hamilton	14,402	15,665	14,375	6,250	11,250
Herkimer	16,546	18,111	16,493	7,334	13,013
Jefferson	16,295	18,482	16,132	7,043	11,950
Lewis	16,257	17,293	16,167	8,797	11,731
Livingston	19,596	21,878	18,928	8,529	17,034
Madison	18,492	20,370	18,567	7,159	14,767
Monroe	24,256	27,322	25,283	8,873	17,316
Montgomery	17,160	19,243	17,335	8,516	13,889
Nassau	28,444	29,857	30,574	11,002	20,220
Niagara	20,674	23,123	20,776	7,217	15,137
Oneida	18,174	20,257	18,649	7,227	14,147
Onondaga	21,222	24,134	21,650	8,580	15,693
Ontario	20,514	22,409	20,144	9,277	15,417
Orange	20,576	22,962	20,396	7,332	14,496
Orleans	20,356	23,010	19,247	7,956	13,523
Oswego	18,815	20,978	18,245	7,202	13,125
Otsego	16,230	18,168	15,887	8,333	12,456
Putnam	26,305	27,474	26,301	11,481	15,787
Rensselaer	19,259	21,913	19,240	7,872	15,330
Rockland	28,243	30,498	29,193	10,955	20,131
St. Lawrence	16,540	19,057	16,351	6,236	12,040
Saratoga	20,712	22,830	20,400	8,579	15,000
Schenectady	20,529	22,829	21,077	8,178	15,297
Schoharie	15,982	17,786	15,370	7,526	13,669
Schuyler	16,719	18,638	16,311	7,805	12,026
Seneca	18,743	20,880	18,541	9,135	14,803
Steuben	17,835	20,040	17,856	8,414	13,498
Suffolk	24,194	26,086	24,427	9,384	17,639
Sullivan	15,925	18,221	15,472	6,656	11,990
Tioga	19,682	22,173	19,416	8,884	14,009
Tompkins	18,790	20,772	19,722	8,350	15,334
Ulster	18,752	21,718	18,281	8,073	14,462
Warren	16,928	19,516	16,973	7,791	12,476
Washington	17,104	19,126	17,055	7,508	12,313
Wayne	20,385	22,619	19,477	8,498	18,077
Westchester	27,278	30,851	29,169	9,720	19,297
Wyoming	18,060	19,739	17,719	8,435	12,676
Yates	16,394	17,935	17,192	6,477	12,643

Source: U.S Department of Commerce, Bureau of the Census, 1983.

Table 5

POVERTY STATUS[1] OF FAMILIES WITH CHILDREN AND OF CHILDREN (0-17 YEARS)

1979

County	Families with Children In Poverty		Children In Poverty	
	Number	Rate[2]	Number	Rate[3]
New York State	387,179	16.4	876,928	19.0
New York City	246,651	25.1	551,533	31.8
Bronx	63,367	36.7	142,628	42.6
Kings	100,026	31.7	231,203	37.1
New York	43,404	20.9	90,964	36.8
Queens	34,896	14.9	75,634	17.6
Richmond	4,958	9.7	11,104	11.0
Rest of State	140,528	10.2	325,395	11.3
Albany	3,557	10.1	8,083	11.9
Allegany	1,062	15.6	2,708	18.8
Broome	2,526	8.9	5,542	10.1
Cattaraugus	1,636	13.7	4,082	16.4
Cayuga	1,389	12.6	3,414	14.9
Chautauqua	2,399	12.1	5,653	14.3
Chemung	1,823	13.3	3,920	14.4
Chenango	893	12.2	2,269	14.9
Clinton	1,388	12.3	3,248	14.5
Columbia	932	11.6	2,093	13.3
Cortland	864	13.1	1,931	14.6
Delaware	877	14.4	2,138	17.3
Dutchess	2,609	7.7	5,817	8.8
Erie	17,847	13.2	38,401	14.4
Essex	724	14.7	1,725	16.9
Franklin	1,012	16.5	2,677	20.1
Fulton	990	13.0	2,428	15.8
Genesee	808	9.5	2,073	11.8
Greene	739	13.3	1,652	15.5
Hamilton	99	15.3	239	17.9
Herkimer	1,195	13.3	3,164	16.7
Jefferson	1,918	15.0	4,578	17.3
Lewis	518	13.9	1,327	16.0
Livingston	768	9.9	1,791	11.4
Madison	1,112	12.4	2,805	14.9
Monroe	9,675	10.1	22,006	11.7
Montgomery	754	11.1	1,840	13.5
Nassau	9,461	5.4	22,271	6.6
Niagara	3,581	11.2	7,504	12.0
Oneida	4,266	12.5	9,658	13.9
Onondaga	6,221	9.9	14,556	11.5
Ontario	1,018	8.1	2,137	8.6
Orange	3,979	10.5	9,959	12.8
Orleans	599	10.7	1,410	12.2
Oswego	2,002	12.0	4,695	13.6
Otsego	934	13.2	2,316	16.5
Putnam	391	3.3	783	3.3
Rensselaer	2,333	11.4	5,578	13.5
Rockland	2,495	6.4	6,683	8.5
St. Lawrence	2,673	17.0	6,476	19.9
Saratoga	1,976	8.5	4,609	9.8
Schenectady	1,930	9.8	4,329	11.5
Schoharie	495	12.8	1,181	15.1
Schuyler	303	11.9	654	12.5
Seneca	407	8.7	847	9.3
Steuben	1,793	12.5	4,644	15.9
Suffolk	14,107	7.2	33,959	8.5
Sullivan	1,223	15.0	3,089	18.9
Tioga	667	8.4	1,561	9.7
Tompkins	1,073	11.0	2,397	13.4
Ulster	2,272	10.6	4,946	12.0
Warren	1,086	13.7	2,571	16.0
Washington	1,006	12.9	2,652	16.0
Wayne	1,186	9.2	2,802	10.8
Westchester	9,987	8.8	21,043	9.9
Wyoming	506	8.7	1,315	11.0
Yates	444	15.1	1,166	19.8

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[1] The poverty threshold is based upon the U.S. Department of Agriculture's estimates of the income that would be needed to provide a basic budget for families of various size and composition. Poverty status for children in 1980 was based on family income in 1979. The poverty level threshold for a four-person family with two children in 1979 was $7,356.

[2] Rate per 100 families with children.

[3] Rate per 100 children.

Source: U.S. Department of Commerce, Bureau of the Census, 1983.

EMPLOYMENT

Employment both increases the family's income level and improves children's access to health insurance coverage. Unemployment not only decreases family resources but often has a destructive impact on family stability. Moreover, according to a recent analysis by the Children's Defense Fund *(1987)*, among young men aged 20-24, joblessness, reduced numbers of hours of work, and erosion of the real value of the minimum wage pose a deterrent to marriage, thereby increasing the rates of out-of-wedlock births and single-parent families.

Increased participation of mothers in the labor force* has added to the level of household incomes, changed patterns of child care, made physical access to health services more complicated, and affected other aspects of family life. In addition, because toxins in the workplace affect fertility and birth outcomes, the quality of workplace environments has gained new importance as a maternal and child health concern.

Teenage employment is important for both economic and social reasons. Many youth contribute earnings to their families' income, and a small number are entirely self-supporting. Furthermore, the transition of youth from school to work is one of the major developmental tasks of adolescence. Although youth in New York State can be legally employed at age 14, the majority of youth in the labor force (i.e., those who are working or who have looked for work within the prior four weeks) are between 16 and 19 years old. In 1985, 42 percent of New York State youth aged 16-19 were in the labor force. Their employment, however, was characteristically episodic, part-time, and for low wages *(CCF, 1988)*.

Since employment data are obtained monthly from local area unemployment statistics, they represent a more current measure of a county's overall economic status than decennial census data. Regrettably, data on youth employment at the county level are unavailable.

- In New York State between 1970 and 1980, the proportion of married couples with children containing two working parents rose from 31 to 42 percent (*CCF, 1988*).
- In 1980 in New York State, 38 percent of all women with preschool-age children were in the labor force, as were 50 percent of women with children aged 6-13 years and 62 percent with children aged 14-17 *(CCF, 1988)*.
- In 1985, white youth (16-19 years) in New York State had higher labor force participation than black youth (46% vs. 27%). Likewise, the unemployment rate* for nonwhite teenagers (42%) was substantially higher than that for white teenagers (15%) *(CCF, 1988)*.

**The labor force is composed of persons aged 16 years old or over who are employed, seeking employment, or waiting to be called back to a job from which they have been laid off. Persons in the latter two situations are considered "unemployed." Unemployment rates are calculated by dividing the number of unemployed people by the total number of people in the labor force.*

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Table 6

RESIDENT CIVILIAN UNEMPLOYMENT AND UNEMPLOYMENT RATE[1]
1980, 1985
(Annual Average)

County	1980		1985	
	Number	Rate[2]	Number	Rate[2]
New York State	597,000	7.5	544,000	6.5
New York City	264,000	8.6	261,000	8.1
Bronx	40,029	8.0	40,433	9.1
Kings	91,637	9.5	88,838	9.7
New York	57,077	9.2	58,240	7.5
Queens	64,772	8.0	64,249	7.0
Richmond	8,734	5.9	9,407	5.8
Rest of State	333,000	6.8	283,000	5.6
Albany	7,125	5.3	6,156	4.2
Allegany	1,764	8.4	1,546	7.9
Broome	5,759	5.9	6,117	5.9
Cattaraugus	3,487	9.5	3,229	9.0
Cayuga	2,841	8.3	2,819	7.8
Chautauqua	5,417	7.9	4,807	7.6
Chemung	3,049	7.7	3,214	8.3
Chenango	1,582	7.0	1,514	7.2
Clinton	2,818	8.7	2,429	7.5
Columbia	1,701	7.0	1,284	4.5
Cortland	1,665	7.9	1,964	9.0
Delaware	1,303	6.2	1,202	6.4
Dutchess	5,637	5.2	4,508	3.6
Erie	44,350	9.5	31,428	7.3
Essex	2,190	12.6	1,551	9.6
Franklin	2,422	12.8	1,830	9.5
Fulton	2,939	11.2	3,300	13.1
Genesee	2,389	8.8	2,098	7.9
Greene	1,833	9.9	1,524	8.5
Hamilton	289	11.7	302	11.9
Herkimer	2,552	8.8	2,713	9.2
Jefferson	4,335	10.8	4,873	12.3
Lewis	1,005	9.4	1,061	9.3
Livingston	1,930	7.0	1,557	5.7
Madison	2,377	7.7	2,102	6.9
Monroe	17,742	5.3	15,219	4.3
Montgomery	2,585	9.8	2,554	9.9
Nassau	36,378	5.6	30,175	4.2
Niagara	11,357	10.7	9,246	9.8
Oneida	7,471	7.0	7,211	6.9
Onondaga	14,286	6.6	11,862	5.2
Ontario	2,996	6.9	3,154	7.0
Orange	8,292	7.6	6,440	5.3
Orleans	1,909	9.9	1,918	10.1
Oswego	5,299	9.7	4,313	8.5
Otsego	1,907	7.1	1,522	5.5
Putnam	1,524	4.9	1,500	3.3
Rensselaer	4,658	6.4	3,691	5.2
Rockland	6,162	5.1	5,719	4.1
St. Lawrence	4,404	10.2	3,583	8.2
Saratoga	4,387	6.0	4,026	5.4
Schenectady	3,493	5.0	3,175	4.5
Schoharie	1,146	9.7	1,056	7.9
Schuyler	579	7.7	591	7.5
Seneca	796	5.3	1,094	7.9
Steuben	3,016	6.8	2,885	7.3
Suffolk	39,900	6.3	31,622	5.0
Sullivan	2,274	8.0	1,613	5.5
Tioga	1,512	6.6	1,622	6.9
Tompkins	1,795	4.7	1,603	3.7
Ulster	5,384	8.0	3,855	4.7
Warren	2,149	9.1	1,904	7.6
Washington	1,815	7.8	1,607	6.4
Wayne	3,319	8.0	3,222	7.8
Westchester	20,239	4.4	17,341	3.7
Wyoming	1,745	9.0	1,498	8.0
Yates	711	8.3	689	7.5

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[1] 1980 and 1985 data for counties are not comparable due to methodological changes. County data for 1980 are on a 1983 benchmark. All 1985 data are based on a 1986 benchmark. Totals for New York State and New York City for 1980 and 1985 are comparable, as both are based on a 1986 benchmark.

[2] The rate is the number of unemployed divided by the sum of the employed and the unemployed.

Sources: New York State Department of Labor, Division of Research and Statistics, 1984, 1987.

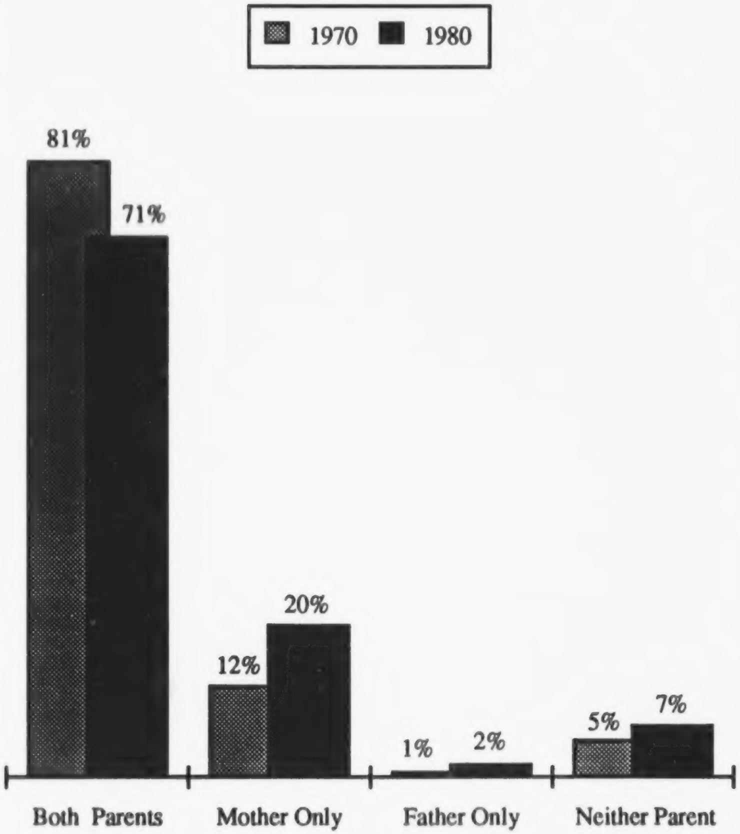
FAMILY STRUCTURE

Children's economic well-being is strongly related to household composition. Therefore, living arrangements are also related to children's health status.

- The majority of children (74%) in New York State lived with both parents in 1980; however, this proportion represents a decline from 1970, when 82 percent of the children lived with both parents *(CCF, 1988)*.
- In New York City, one-third of all children were living with a single parent (in almost all cases the mother) in 1980. In the rest of the state, this was true for only 15 percent *(Table 7)*.
- In New York State in 1980, children living in families maintained by single mothers were six times more likely to be living below the poverty threshold than were children living with married couples, and over twice as likely as those living with single fathers *(CCF, 1988)*.
- In 1980, approximately 7 percent of New York State children under the age of 18 years lived with neither parent. The majority of these children lived with a relative (usually a grandparent); some children headed their own households; and the rest lived in residential care *(Table 7)*.

Figure 7

Family Structure of Children (0-17 Years)
New York State, 1980



Sources: U.S. Department of Commerce, Bureau of the Census, 1973, 1982.

Table 7

FAMILY STRUCTURE OF CHILDREN (0-17 YEARS)
1980

	Children Living With[1]							
	Both Parents		Single Mother		Single Father		Neither Parent[2]	
County	Number	%	Number	%	Number	%	Number	%
New York State	3,341,263	71%	918,014	20%	98,431	2%	330,155	7%
New York City	1,023,481	58	546,313	31	42,913	2	152,760	9
Bronx	157,310	46	142,617	42	9,123	3	32,660	10
Kings	349,101	55	216,569	34	15,475	2	50,370	8
New York	127,386	50	90,540	36	7,763	3	27,555	11
Queens	308,225	71	82,546	19	9,047	2	36,656	8
Richmond	81,459	79	14,041	14	1,505	1	5,519	5
Rest of State	2,317,782	79	371,701	13	55,518	2	177,395	6
Albany	51,606	75	11,361	16	1,522	2	4,676	7
Allegany	11,894	81	1,484	10	306	2	955	7
Broome	44,335	80	6,706	12	1,104	2	3,400	6
Cattaraugus	20,053	78	3,040	12	595	2	1,996	8
Cayuga	18,613	80	2,789	12	570	2	1,431	6
Chautauqua	31,594	78	4,993	12	967	2	2,709	7
Chemung	21,294	77	3,834	14	618	2	1,735	6
Chenango	12,169	79	1,576	10	451	3	1,204	8
Clinton	18,829	82	2,265	10	512	2	1,299	6
Columbia	12,604	78	1,805	11	446	3	1,306	8
Cortland	10,613	79	1,595	12	380	3	915	7
Delaware	10,200	80	1,273	10	306	2	948	7
Dutchess	54,847	80	7,720	11	1,418	2	4,478	7
Erie	202,961	75	46,328	17	5,088	2	15,761	6
Essex	8,199	79	1,073	10	262	3	853	8
Franklin	10,818	79	1,472	11	386	3	1,020	7
Fulton	12,366	78	1,913	12	425	3	1,174	7
Genesee	14,718	82	1,804	10	354	2	1,082	6
Greene	8,467	78	1,398	13	195	2	774	7
Hamilton	1,137	84	87	6	57	4	78	6
Herkimer	15,617	82	1,937	10	397	2	1,097	6
Jefferson	21,334	79	3,178	12	702	3	1,889	7
Lewis	7,206	86	552	7	170	2	450	5
Livingston	12,835	80	1,720	11	428	3	1,026	6
Madison	15,376	80	2,172	11	464	2	1,167	6
Monroe	144,000	75	32,805	17	3,940	2	11,083	6
Montgomery	11,104	80	1,662	12	326	2	858	6
Nassau	281,488	83	34,180	10	4,350	1	19,010	6
Niagara	49,308	78	9,053	14	1,292	2	3,691	6
Oneida	55,784	79	9,364	13	1,304	2	4,236	6
Onondaga	96,917	76	20,652	16	2,761	2	7,779	6
Ontario	20,334	81	2,749	11	565	2	1,505	6
Orange	62,726	79	9,779	12	1,523	2	5,210	7
Orleans	9,363	79	1,292	11	241	2	913	8
Oswego	28,224	80	3,777	11	963	3	2,329	7
Otsego	11,679	81	1,463	10	322	2	1,031	7
Putnam	21,494	88	1,597	7	339	1	1,120	5
Rensselaer	32,828	78	5,591	13	950	2	2,599	6
Rockland	67,562	84	7,717	10	1,028	1	3,942	5
St. Lawrence	26,909	81	3,493	10	699	2	2,171	7
Saratoga	39,900	84	4,593	10	881	2	2,263	5
Schenectady	29,747	77	5,669	15	805	2	2,176	6
Schoharie	6,479	81	723	9	205	3	604	8
Schuyler	4,389	81	443	8	143	3	441	8
Seneca	7,452	79	1,015	11	235	3	675	7
Steuben	23,631	80	3,323	11	768	3	1,988	7
Suffolk	333,979	82	43,839	11	5,939	1	21,967	5
Sullivan	12,764	75	2,174	13	449	3	1,600	9
Tioga	13,541	83	1,463	9	367	2	948	6
Tompkins	14,235	76	2,643	14	525	3	1,429	8
Ulster	32,605	77	5,541	13	1,186	3	3,038	7
Warren	12,733	78	2,084	13	428	3	1,117	7
Washington	13,742	81	1,640	10	400	2	1,117	7
Wayne	20,956	79	2,899	11	644	2	1,965	7
Westchester	167,207	77	32,839	15	3,407	2	14,003	6
Wyoming	10,122	83	972	8	283	2	761	6
Yates	4,895	81	592	10	127	2	403	7

[1] The Bureau of the Census codes relationships within households with reference to the householder. Children with a parent are the householder's "own" children. The definitional difference between both parents and single parents is the presence of a spouse.

[2] Children with neither parent present may themselves be the householder or spouse, or they may be living with a householder other than their parents. They may also be living in institutions or other group residences. On average, nearly 3 percent of the children with "neither parent" are in fact living with one or more parents in a subfamily (i.e. the parent is not the householder but is related in some way to the householder).

Note: Percentages may not sum to 100 due to rounding.

Source: U.S. Department of Commerce, Bureau of the Census, 1982.

PARENTS' EDUCATION

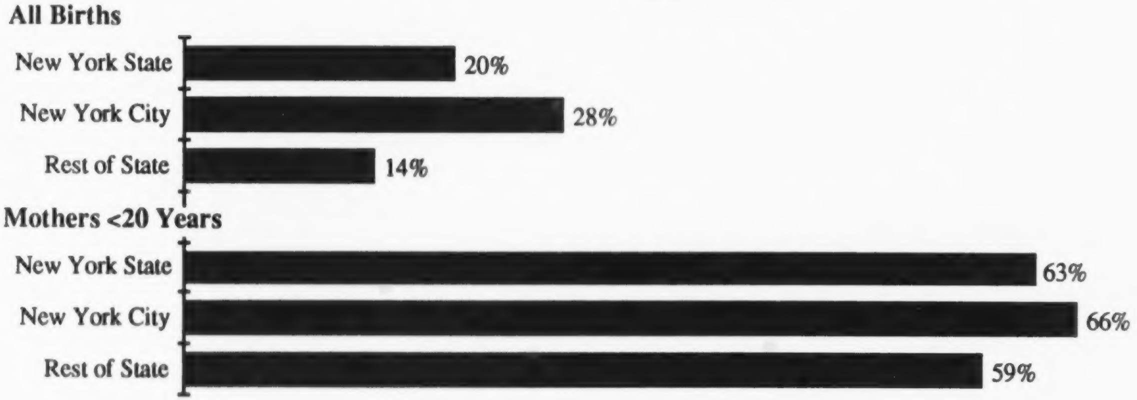
Parents' educational attainment, another aspect of socioeconomic status, is also positively correlated with many aspects of health status. With higher levels of education, parents are more apt to provide their children with proper nutrition and a safe environment. In addition, parents with more education tend to show better judgment in deciding when to seek health services and which services are most appropriate. Further, following a doctor's written instructions and understanding labels on bottles of medication require functional literacy *(DHHS, 1985a).*

The best measure of new mothers' socioeconomic status is the entry for educational attainment reported on birth certificates; income data are not reported on birth records.

- Twenty percent of all babies born in New York State in 1985 were born to mothers who had not completed high school. In New York City, that figure was 28 percent (*Table 8*).

Figure 8

Percentage of Births to Mothers With Less Than a High School Education 1985



Source: New York State Department of Health, Bureau of Biostatistics, 1986.

Table 8

LIVE BIRTHS BY MATERNAL AGE AND EDUCATION
1985

	Live Births							
	To All Mothers				To Mothers <20 Years			
	<8th Grade		<High School		<8th Grade		<High School	
County	N	Rate[1]	N	Rate[1]	N	Rate[1]	N	Rate[1]
New York State	5,138	2.0	50,930	20.3	696	2.8	15,739	62.6
New York City	4,189	3.8	31,330	28.4	479	3.7	8,509	66.2
Bronx	802	3.8	8,687	41.6	137	4.1	2,455	73.5
Kings	2,131	5.2	12,436	30.6	227	4.4	3,487	67.0
New York	810	4.4	5,647	30.9	72	3.7	1,268	64.6
Queens	426	1.7	4,001	15.5	40	1.9	1,129	54.6
Richmond	20	0.4	559	11.3	3	1.0	170	59.2
Rest of State	949	0.7	19,600	13.9	217	1.8	7,230	58.9
Albany	8	0.2	439	12.9	4	1.2	188	54.2
Allegany	2	0.3	100	15.3	0	0.0	35	47.3
Broome	4	0.1	377	13.0	2	0.8	150	57.3
Cattaraugus	11	0.8	319	23.0	4	1.9	111	53.1
Cayuga	7	0.6	230	20.1	4	2.7	92	61.7
Chautauqua	14	0.7	376	18.1	3	1.4	122	58.7
Chemung	4	0.3	272	20.9	2	1.2	111	66.9
Chenango	1	0.1	124	17.6	0	0.0	45	52.3
Clinton	4	0.3	239	17.0	2	1.3	82	51.2
Columbia	2	0.3	141	18.5	0	0.0	55	61.1
Cortland	4	0.6	115	18.4	0	0.0	48	64.0
Delaware	2	0.3	114	19.0	2	2.6	47	61.0
Dutchess	11	0.4	375	12.1	1	0.5	113	61.1
Erie	61	0.5	2,097	15.6	28	2.0	853	61.5
Essex	3	0.6	88	17.2	0	0.0	44	61.1
Franklin	5	0.8	131	20.4	2	1.8	63	55.3
Fulton	5	0.7	179	25.9	2	1.8	73	65.8
Genesee	2	0.2	127	13.9	0	0.0	57	57.6
Greene	4	0.8	86	16.6	3	5.2	32	55.2
Hamilton	0	0.0	9	16.4	0	0.0	3	75.0
Herkimer	6	0.7	174	19.7	1	1.0	54	56.3
Jefferson	13	0.9	289	20.8	3	1.5	125	63.8
Lewis	3	0.8	65	16.3	2	3.8	29	54.7
Livingston	2	0.3	97	12.6	0	0.0	29	44.6
Madison	2	0.2	145	15.7	2	2.1	56	58.3
Monroe	80	0.8	1,579	15.2	22	2.4	600	65.7
Montgomery	1	0.2	127	19.6	0	0.0	42	67.7
Nassau	213	1.4	1,222	8.1	17	2.4	372	53.0
Niagara	16	0.5	515	16.3	6	1.7	207	60.0
Oneida	25	0.7	590	16.3	8	1.9	228	53.3
Onondaga	30	0.4	1,075	14.7	14	1.8	486	63.5
Ontario	3	0.2	162	12.7	0	0.0	57	56.4
Orange	44	1.0	794	18.3	9	2.1	264	62.4
Orleans	3	0.5	117	19.1	1	1.2	54	64.3
Oswego	6	0.3	348	19.4	3	1.5	124	62.6
Otsego	0	0.0	103	14.2	0	0.0	29	52.7
Putnam	3	0.3	57	5.2	0	0.0	13	65.0
Rensselaer	13	0.6	333	16.0	7	3.3	124	57.7
Rockland	3	0.1	252	7.5	1	0.6	88	52.4
St. Lawrence	8	0.5	299	19.9	2	1.1	101	54.3
Saratoga	10	0.4	251	11.0	3	1.7	101	56.1
Schenectady	6	0.3	286	14.1	2	1.3	98	61.6
Schoharie	4	1.1	52	14.4	2	5.9	17	50.0
Schuyler	1	0.5	38	18.4	0	0.0	21	77.8
Seneca	0	0.0	79	15.8	0	0.0	30	55.6
Steuben	1	0.1	326	22.9	0	0.0	136	61.8
Suffolk	104	0.6	1,671	9.9	20	2.0	543	54.5
Sullivan	15	1.6	179	18.5	3	2.9	62	60.8
Tioga	2	0.3	112	14.2	1	1.2	49	57.6
Tompkins	8	0.7	116	10.5	1	1.3	51	65.4
Ulster	8	0.4	330	15.8	6	3.4	104	59.1
Warren	5	0.7	130	17.3	1	1.3	48	60.0
Washington	2	0.3	158	20.7	2	1.6	71	57.7
Wayne	4	0.3	256	18.1	1	0.7	94	63.1
Westchester	149	1.4	1,199	11.6	18	2.9	355	57.3
Wyoming	1	0.2	77	13.3	0	0.0	34	54.8
Yates	1	0.3	59	20.6	0	0.0	10	43.5

[1] Rate per 100 live births (excludes births for which mother's education is not known).

Source: New York State Department of Health, Bureau of Biostatistics, 1986.

PUBLIC ASSISTANCE PROGRAMS

New York State administers a variety of public assistance programs for families in financial need. These programs provide either cash or noncash benefits to families who are below or close to the poverty level.

The level of program participation within a community may be interpreted in many ways. Comparisons with statistics from previous years provide data users with an indirect means of updating the economic status of their community or estimating the unmet need for services. Some caution must be used, however, in making inferences from such figures, since participation rates may be affected as much by public policy as demographics. For example, the comparatively low level of participation in such federally funded programs as Aid to Families with Dependent Children (AFDC), Food Stamps, and National School Lunch may be the result of federal efforts in the early 1980s to reduce the federal budget by tightening eligibility requirements.

Income Maintenance Programs

Aid to Families with Dependent Children (AFDC) is the principal cash assistance program for income-eligible families with children. A federally funded program, AFDC has its roots in the Social Security Act of 1935 (Title IV) and was originally designed to

> *release from the wage-earning role the person whose natural function is to give her children the physical and affectionate guardianship necessary not alone to keep them from falling into social misfortune, but more affirmatively to rear them into citizens capable of contributing to society (United States Congress, 1935 p.3).*

Since 1969, when the Work Incentive Program (WIN) was initiated, the focus of the program has changed to encourage parents receiving AFDC to obtain employment whenever possible. AFDC is granted to poor single-parent families and to poor two-parent families with children in which a working parent has recently become unemployed.

Home Relief is a general assistance program funded by New York State that provides benefits to poor children whose families do not qualify for AFDC (e.g., children in two-parent families who are poor despite their parents' employment). Although differing eligibility requirements preclude the receipt of both AFDC and Home Relief benefits at any one point in time, over the course of the year changing circumstances (e.g., parental employment) may result in some children's receiving benefits from both programs.

The Supplemental Security Income (SSI) program gives financial assistance to unemployable adults and children with disabilities. Children receiving SSI benefits are not eligible to receive assistance from either AFDC or Home Relief. However, a family with a child who is receiving SSI can receive AFDC for other eligible children, since SSI benefits are not counted as income when calculating the family's eligibility for AFDC.

- The proportion of children in New York State who were living in poverty increased from nearly 20 percent in 1980 to approximately 25 percent in 1985. In both 1980 and 1985, approximately 15 percent of New York State's children received AFDC *(CCF, 1987b, 1988).*
- In 1985, 65 percent of all persons in New York State receiving AFDC were children *(Table 9).*

Nutrition Assistance Programs

Good nutrition is fundamental to the health, performance, and well-being of infants, children, and adolescents. It is a prerequisite for optimal growth and development, the promotion and maintenance of health, the prevention and treatment of disease, and recovery and rehabilitation from illness *(DHHS, 1981).* Conversely, inadequate nutrition is associated with such negative consequences as low birth weight, stunted growth, failure to thrive, obesity, iron deficiency anemia, lead poisoning, increased susceptibility to infection, tooth decay, and poor performance in school *(Dwyer, 1981; Mahaffey, Gartside, & Glueck, 1986; U.S. House of Representatives, Select Committee on Hunger [Committee on Hunger], 1985a).*

Participation in nutrition assistance programs can help ameliorate the dietary effects of inadequate income. Such programs include the federally funded Special Supplemental Food Program for Women, Infants, and Children (WIC), the New York State-funded Supplemental Nutrition Assistance Program (SNAP), and the national Food Stamp and School Lunch programs. A given child may qualify for more than one of these programs.

The WIC program provides supplemental, nutritious food to low-income pregnant and lactating women and infants and children under 5 years of age who are at nutritional risk. Each participant receives a monthly set of food vouchers redeemable at local grocery stores for specific foods tailored to their individual needs. Nutrition education is also provided.

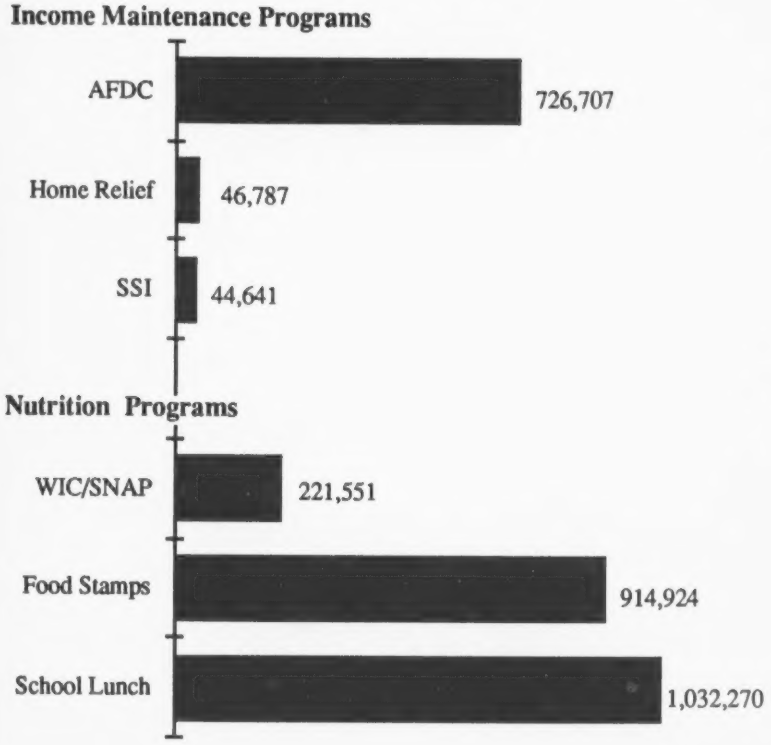
Because of its limited funding, the WIC program is unable to meet the full need for nutritional assistance among the target population — families with incomes below 185 percent of the poverty level. It is estimated that less than 25 percent of the eligible population participates in the program nationally; in 1985 an estimated 40 percent participated in New York *(DHHS, 1981; New York State Department of Health [DOH], Bureau of Nutrition, 1986).* SNAP was intiated by New York State in 1984 to expand WIC-type benefits to low-income women, infants, and children as well as the frail elderly and homeless *(Committee on Hunger, 1986).* In 1985, roughly 6 percent of all WIC-eligible individuals in the state were served by the SNAP program each month.

For many low-income families with children, the Food Stamp program is the major means of ensuring an adequate diet. Studies have shown that participation in the program is associated with significant improvements in dietary intake *(Committee on Hunger, 1985b).* Concerns have been raised, however, about the adequacy of benefit levels and the high rates of nonparticipation among eligible individuals. According to the United States Department of Agriculture's (USDA) 1977-78 Nationwide Food Consumption Survey, only 12 percent of low-income households spending at the full Food Stamp allotment obtained 100 percent of their recommended dietary allowances, and only a third obtained at least 80 percent. Further, over 40 percent of the eligible population nationwide did not participate in the Food Stamp program *(Committee on Hunger, 1985b).*

The National School Lunch program delivers benefits to substantial numbers of poor children. On a national level, this program is available in 75 percent of all schools attended by approximately 90 percent of all school-age children. A 1981 USDA study found that students from families qualifying for free or reduced-price meals were dependent upon the School Lunch program for between 34 and 49 percent of their daily nutrient intake *(Committee on Hunger, 1985b).*

Figure 9

Number of Children Enrolled in Selected Public Assistance Programs New York State, 1985



Source: Tables 9 - 14.

Table 9

AID TO FAMILIES WITH DEPENDENT CHILDREN (AFDC)
AVERAGE NUMBER OF MONTHLY CASES, CHILDREN, AND RATES
1985

County	Cases	Total Recipients	Children[1]	Rate per 100 Children[2]
New York State	373,086	1,109,610	726,707	15.8
New York City	252,600	752,079	495,531	27.1
Rest of State	120,486	357,531	231,176	8.3
Albany	2,476	6,929	4,569	6.6
Allegany	1,068	3,457	2,097	13.0
Broome	1,880	5,523	3,403	6.3
Cattaraugus	1,317	4,075	2,437	9.6
Cayuga	1,132	3,566	2,226	10.0
Chautauqua	2,438	7,613	4,626	11.7
Chemung	1,908	5,819	3,573	13.7
Chenango	405	1,310	841	5.8
Clinton	925	2,642	1,603	7.0
Columbia	587	1,633	1,055	6.8
Cortland	770	2,482	1,493	10.7
Delaware	477	1,336	847	6.7
Dutchess	1,520	4,225	2,846	4.2
Erie	20,232	59,482	37,942	15.1
Essex	492	1,644	999	10.8
Franklin	734	2,307	1,371	11.0
Fulton	619	1,988	1,255	8.2
Genesee	445	1,285	824	4.9
Greene	290	950	644	6.3
Hamilton	37	106	66	5.7
Herkimer	681	2,214	1,362	7.5
Jefferson	1,441	4,536	2,717	10.5
Lewis	240	805	491	6.4
Livingston	435	1,263	782	4.6
Madison	528	1,522	966	4.7
Monroe	12,003	37,604	25,283	13.2
Montgomery	515	1,631	1,046	7.8
Nassau	6,133	16,418	11,197	3.7
Niagara	4,095	11,926	7,360	12.7
Oneida	3,730	11,917	7,640	11.3
Onondaga	6,431	18,713	12,243	9.8
Ontario	680	1,934	1,183	4.8
Orange	3,023	10,560	7,481	9.2
Orleans	533	1,671	1,063	9.7
Oswego	1,564	5,014	3,160	8.7
Otsego	434	1,327	812	5.0
Putnam	129	281	171	0.8
Rensselaer	1,609	4,866	3,058	7.3
Rockland	1,613	5,063	3,435	4.8
St. Lawrence	2,031	6,599	3,964	11.5
Saratoga	824	2,328	1,507	3.3
Schenectady	1,608	4,717	2,963	8.2
Schoharie	249	769	454	5.0
Schuyler	185	566	359	7.4
Seneca	197	563	366	4.3
Steuben	1,543	4,755	2,892	10.6
Suffolk	11,940	34,759	23,055	6.4
Sullivan	566	1,706	1,164	6.9
Tioga	521	1,493	928	6.4
Tompkins	851	2,511	1,553	6.3
Ulster	1,529	4,310	2,758	6.7
Warren	385	1,132	722	4.7
Washington	534	1,512	953	6.1
Wayne	767	2,306	1,498	5.9
Westchester	10,788	28,693	19,147	9.4
Wyoming	200	578	349	3.0
Yates	199	597	377	6.6

[1] A child is eligible for AFDC if under 18 years of age or if under 19 if he or she is a full-time student in a secondary school or in the equivalent of vocational or technical training and is expected to complete the program before reaching age 19.

[2] Rates are based on the population under 18 years of age.

Source: New York State Department of Social Services, 1986.

Table 10

CHILDREN RECEIVING HOME RELIEF, BY AGE[1]
1985

County	Age 0-4	Age 5-9	Age 10-14	Age 15-19	Total Children	Rate per 100 Children[2]
New York State	13,861	10,293	7,382	15,251	46,787	1.0
New York City	7,376	6,463	5,052	8,703	27,594	1.4
Rest of State	6,485	3,830	2,330	6,548	19,193	0.6
Albany	105	66	46	103	320	0.4
Allegany	126	67	44	99	334	1.9
Broome	144	76	47	157	424	0.7
Cattaraugus	91	45	22	89	247	0.9
Cayuga	71	44	32	91	238	1.0
Chautauqua	216	98	57	229	600	1.4
Chemung	250	108	43	108	509	1.8
Chenango	39	14	9	33	95	0.6
Clinton	118	44	23	101	286	1.2
Columbia	61	32	15	47	155	0.9
Cortland	67	37	9	50	163	1.1
Delaware	26	10	10	53	99	0.7
Dutchess	45	30	16	50	141	0.2
Erie	698	320	223	1,058	2,299	0.9
Essex	34	23	19	56	132	1.3
Franklin	100	42	23	67	232	1.8
Fulton	28	18	6	28	80	0.5
Genesee	44	19	8	17	88	0.5
Greene	20	10	7	26	63	0.6
Hamilton	0	2	4	13	19	1.5
Herkimer	44	40	5	29	118	0.6
Jefferson	140	76	45	101	362	1.3
Lewis	50	18	12	14	94	1.2
Livingston	28	11	8	34	81	0.4
Madison	33	18	2	26	79	0.4
Monroe	444	250	150	671	1,515	0.7
Montgomery	31	16	2	22	71	0.5
Nassau	100	107	95	153	455	0.1
Niagara	300	144	95	273	812	1.3
Oneida	150	60	59	241	510	0.7
Onondaga	284	145	74	256	759	0.6
Ontario	26	21	16	46	109	0.4
Orange	347	305	229	158	1,039	1.2
Orleans	52	24	25	29	131	1.1
Oswego	124	65	36	97	322	0.8
Otsego	50	27	26	34	137	0.8
Putnam	0	0	0	9	9	*.*
Rensselaer	43	43	21	48	155	0.3
Rockland	261	266	212	175	914	1.2
St. Lawrence	169	98	42	166	475	1.3
Saratoga	59	27	9	25	120	0.2
Schenectady	86	37	28	90	241	0.6
Schoharie	38	10	10	30	88	0.9
Schuyler	53	25	13	15	106	2.1
Seneca	22	17	3	22	64	0.7
Steuben	139	54	30	99	322	1.1
Suffolk	407	335	178	411	1,331	0.3
Sullivan	39	26	17	24	106	0.6
Tioga	77	47	15	86	225	1.5
Tompkins	60	33	5	78	176	0.6
Ulster	70	43	20	53	186	0.4
Warren	21	10	0	5	36	0.2
Washington	42	28	10	21	101	0.6
Wayne	48	35	18	55	156	0.6
Westchester	347	259	154	453	1,213	0.6
Wyoming	14	4	3	16	37	0.3
Yates	4	1	0	8	13	0.2

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[1] Estimated

[2] "*.*" indicates a rate less than 0.05 per 100 children.

Source: New York State Department of Social Services, Bureau of Data Management and Analysis, 1987.

Table 11

CHILDREN RECEIVING SUPPLEMENTAL SECURITY INCOME, BY AGE
1986

County	Age 0-4	Age 5-9	Age 10-14	Age 15-19	Total Children	Rate per 100 Childen
New York State[1]	5,950	13,454	14,825	10,412	44,641	0.9
New York City	3,222	7,568	8,466	5,829	25,085	1.3
Rest of State	2,706	5,735	5,901	3,868	18,210	0.6
Albany	60	130	139	102	431	0.6
Allegany	19	55	39	31	144	0.8
Broome	48	120	99	57	324	0.6
Cattaraugus	45	75	67	33	220	0.8
Cayuga	27	55	61	42	185	0.8
Chautauqua	66	141	118	71	396	0.9
Chemung	52	90	88	45	275	1.0
Chenango	18	40	45	20	123	0.8
Clinton	22	50	72	28	172	0.7
Columbia	25	50	40	28	143	0.9
Cortland	19	42	35	19	115	0.8
Delaware	22	46	47	24	139	1.0
Dutchess	49	82	113	85	329	0.5
Erie	271	601	585	382	1,839	0.7
Essex	13	40	30	16	99	1.0
Franklin	16	50	49	21	136	1.0
Fulton	31	49	46	36	162	1.0
Genesee	14	41	26	17	98	0.6
Greene	13	36	47	11	107	1.0
Hamilton	3	4	1	0	8	0.6
Herkimer	36	48	43	19	146	0.8
Jefferson	41	68	77	61	247	0.8
Lewis	8	24	22	12	66	0.8
Livingston	11	18	33	16	78	0.4
Madison	27	43	32	33	135	0.6
Monroe	149	341	372	269	1,131	0.6
Montgomery	22	53	60	29	164	1.2
Nassau	226	519	493	296	1,534	0.5
Niagara	53	119	127	63	362	0.6
Oneida	96	215	171	133	615	0.9
Onondaga	106	246	278	176	806	0.6
Ontario	23	37	33	24	117	0.4
Orange	64	145	143	126	478	0.5
Orleans	15	21	20	14	70	0.6
Oswego	33	86	85	53	257	0.7
Otsego	13	45	51	40	149	0.9
Putnam	9	11	16	26	62	0.3
Rensselaer	45	98	91	79	313	0.7
Rockland	60	108	132	74	374	0.5
St. Lawrence	48	93	119	73	333	0.9
Saratoga	37	61	65	58	221	0.5
Schenectady	49	72	73	56	250	0.7
Schoharie	17	23	27	10	77	0.8
Schuyler	10	19	15	6	50	1.0
Seneca	8	10	23	8	49	0.5
Steuben	40	95	60	52	247	0.9
Suffolk	223	513	607	424	1,767	0.5
Sullivan	29	57	62	31	179	1.0
Tioga	9	29	23	14	75	0.5
Tompkins	20	30	41	20	111	0.4
Ulster	69	93	118	61	341	0.8
Warren	21	44	51	31	147	0.9
Washington	27	37	38	26	128	0.8
Wayne	22	47	55	37	161	0.6
Westchester	193	433	461	324	1,411	0.7
Wyoming	12	23	23	14	72	0.6
Yates	2	14	14	12	42	0.7
OMH Foster Care	12	50	91	163	316	**.*
OMH Institution	10	101	367	552	1,030	**.*

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[1] The New York State total includes children living in foster care or institutions administered by the New York State Office of Mental Health (OMH). These children are not included in either the New York City or rest of state totals.

Source: New York State Department of Social Services, Bureau of Data Management and Analysis, 1987.

Table 12

PARTICIPATION IN THE WIC[1] AND SNAP[2] NUTRITIONAL PROGRAMS FISCAL YEAR 1985

County	Women	Infants (<1 yr)	Children (1-4 yrs)	Total Infants & Children	Rate per 100 Infants & Children[3]
New York State	52,569	72,553	148,998	221,551	18.5
New York City	31,058	42,315	86,426	128,741	25.9
Bronx	5,636	9,305	15,982	25,287	26.9
Kings	14,727	17,770	40,645	58,415	31.9
New York	6,673	9,106	18,021	27,127	36.4
Queens	3,695	5,194	10,061	15,255	12.9
Richmond	327	940	1,717	2,657	9.9
Rest of State	21,511	30,238	62,572	92,810	13.2
Albany	735	865	2,017	2,882	16.6
Allegany	181	206	431	637	17.7
Broome	558	709	1,816	2,525	18.4
Cattaraugus	401	415	1,016	1,431	21.7
Cayuga	266	358	1,091	1,449	24.4
Chautauqua	824	859	2,499	3,358	32.7
Chemung	293	454	1,176	1,630	24.1
Chenango	184	238	699	937	24.6
Clinton	226	370	1,162	1,532	26.1
Columbia	206	253	668	921	22.1
Cortland	198	259	674	933	27.9
Delaware	176	186	502	688	22.3
Dutchess	198	540	496	1,036	6.1
Erie	2,496	3,329	5,793	9,122	14.3
Essex	150	166	505	671	29.8
Franklin	252	322	719	1,041	31.5
Fulton	156	201	541	742	19.4
Genesee	102	205	481	686	15.4
Greene	111	136	361	497	20.2
Hamilton	7	9	27	36	12.3
Herkimer	232	306	827	1,133	24.0
Jefferson	288	368	784	1,152	16.6
Lewis	72	92	207	299	14.6
Livingston	164	155	497	652	16.0
Madison	245	323	874	1,197	25.4
Monroe	1,104	2,191	3,401	5,592	10.8
Montgomery	144	186	501	687	20.2
Nassau	975	1,182	1,337	2,519	3.3
Niagara	419	790	1,273	2,063	13.6
Oneida	748	1,181	1,803	2,984	16.8
Onondaga	873	2,037	2,910	4,947	14.7
Ontario	113	222	323	545	8.4
Orange	729	819	1,670	2,489	11.9
Orleans	98	199	465	664	23.3
Oswego	367	424	877	1,301	14.7
Otsego	205	201	499	700	18.3
Putnam	28	32	74	106	1.8
Rensselaer	263	639	1,579	2,218	21.2
Rockland	524	506	1,070	1,576	8.6
St. Lawrence	364	466	993	1,459	18.7
Saratoga	377	426	1,139	1,565	13.5
Schenectady	306	455	972	1,427	15.3
Schoharie	113	148	393	541	27.9
Schuyler	449	76	189	265	21.0
Seneca	60	118	173	291	12.9
Steuben	295	336	699	1,035	14.3
Suffolk	1,108	1,923	4,221	6,144	7.1
Sullivan	243	290	918	1,208	26.7
Tioga	103	186	463	649	15.8
Tompkins	148	229	568	797	15.0
Ulster	395	396	701	1,097	10.1
Warren	172	209	577	786	19.8
Washington	213	206	720	926	24.5
Wayne	200	390	569	959	14.1
Westchester	1,929	2,209	5,149	7,358	14.1
Wyoming	52	106	247	353	11.2
Yates	62	122	178	300	19.9
Migrants	11	14	58	72	***.*

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[1] WIC - Special Supplemental Food Program for Women, Infants, and Children.

[2] SNAP - Supplemental Nutrition Assistance Program.

[3] "***.*" indicates that a rate could not be calculated because the total population upon which the rate was based was not known.

Source: New York State Department of Health, Bureau of Nutrition,1986.

Table 13

CHILDREN RECEIVING FOOD STAMPS
1985 MONTHLY AVERAGE[1]

County	Age[2] 0-4	5-9	10-14	15-19	Total Children[3]	Rate per 100 Children
New York State	*	*	*	176,701	914,924	18.7
New York City	*	*	*	125,237	604,446	31.2
Rest of State	102,923	89,657	66,434	51,464	310,478	10.5
Albany	2,650	2,101	1,516	1,249	7,516	10.1
Allegany	1,069	952	749	546	3,314	19.1
Broome	1,984	1,654	1,039	735	5,413	9.4
Cattaraugus	1,402	1,183	847	649	4,081	15.1
Cayuga	1,122	1,041	837	605	3,606	15.3
Chautauqua	2,485	2,144	1,644	1,209	7,484	17.9
Chemung	1,687	1,484	998	760	4,930	17.8
Chenango	652	609	373	311	1,946	12.8
Clinton	1,163	838	614	600	3,216	13.1
Columbia	668	536	384	334	1,922	11.8
Cortland	737	699	493	412	2,340	15.6
Delaware	501	407	339	225	1,473	11.0
Dutchess	1,149	1,049	691	389	3,279	4.5
Erie	15,619	13,766	10,886	9,086	49,356	18.4
Essex	462	429	326	279	1,496	15.2
Franklin	818	644	513	438	2,415	18.3
Fulton	775	758	578	387	2,498	15.4
Genesee	520	434	264	219	1,438	8.1
Greene	325	249	171	160	906	8.3
Hamilton	84	62	56	51	253	20.5
Herkimer	845	750	547	393	2,535	13.1
Jefferson	1,565	1,321	963	799	4,648	17.0
Lewis	379	323	234	156	1,092	13.4
Livingston	451	395	259	208	1,313	7.2
Madison	813	659	483	341	2,296	10.4
Monroe	8,917	7,262	5,403	4,543	26,126	12.8
Montgomery	730	605	436	349	2,120	15.0
Nassau	3,199	3,119	2,354	1,708	10,382	3.2
Niagara	3,523	3,097	2,246	1,651	10,518	17.1
Oneida	4,038	3,381	2,541	2,204	12,162	16.9
Onondaga	5,749	4,560	3,159	2,397	15,865	11.8
Ontario	567	541	367	309	1,784	6.8
Orange	3,070	2,857	2,052	1,350	9,327	10.8
Orleans	593	504	405	298	1,799	15.5
Oswego	1,594	1,411	1,023	761	4,789	12.4
Otsego	630	527	379	245	1,781	10.2
Putnam	81	75	48	29	234	1.0
Rensselaer	1,609	1,359	1,048	772	4,786	10.7
Rockland	2,151	1,847	1,352	832	6,184	8.1
Saratoga	918	846	651	447	2,862	5.9
Schenectady	1,390	1,130	787	613	3,918	10.1
Schoharie	378	309	275	180	1,142	11.7
Schuyler	253	268	183	127	831	16.3
Seneca	240	204	142	104	690	7.6
St. Lawrence	2,071	1,853	1,398	1,096	6,418	17.3
Steuben	1,665	1,442	1,129	857	5,094	17.7
Suffolk	7,053	6,719	5,279	3,690	22,737	5.9
Sullivan	730	627	439	266	2,061	11.5
Tioga	519	512	353	225	1,609	10.5
Tompkins	807	694	441	356	2,297	8.4
Ulster	1,388	1,219	813	601	4,023	9.2
Warren	512	478	340	287	1,668	10.3
Washington	666	610	428	347	2,051	12.3
Wayne	790	617	381	294	2,082	7.7
Westchester	6,527	5,969	4,378	3,673	20,547	9.5
Wyoming	366	288	187	131	972	7.9
Yates	274	240	213	181	908	14.9

[1] Estimated.

[2] Age breaks below 15 years were not available at these intervals for children living in New York City. However, there were 201,758 children under 6 years of age and 277,451 children 6-14 years of age receiving Food Stamps in New York City during June 1985.

[3] Number receiving Food Stamps by age category may not sum to total due to rounding.

[4] New York City data are for June 1985.

Sources: New York State Department of Social Services, Bureau of Data Management and Analysis, 1987;
New York City Human Resources Administration, 1986.

Table 14

PARTICIPATION[1] IN THE NATIONAL SCHOOL LUNCH PROGRAM DECEMBER 1985

County	Total Student Enrollment[2]	Eligible Applicants		Percentage of Students Eligible
		Free	Reduced Price	
New York State	3,116,394	867,064	165,206	33%
New York City	1,221,091	521,222	81,540	49
Rest of State	1,903,478	345,842	83,666	23
Albany	44,359	11,272	1,483	29
Allegany	9,705	2,753	606	35
Broome	36,956	4,941	1,623	18
Cattaraugus	19,080	4,084	1,319	28
Cayuga	13,753	2,401	546	21
Chautauqua	26,669	5,902	1,428	27
Chemung	16,455	3,748	762	27
Chenango	10,940	2,502	700	29
Clinton	15,474	2,940	1,358	28
Columbia	10,522	1,842	429	22
Cortland	8,631	1,929	533	29
Delaware	8,276	1,953	647	31
Dutchess	45,391	4,689	1,448	14
Erie	169,162	42,665	11,507	32
Essex	5,767	1,436	448	33
Franklin	9,524	3,504	841	46
Fulton	10,458	2,412	750	30
Genesee	11,839	1,610	679	19
Greene	7,410	958	262	16
Hamilton	778	230	114	44
Herkimer	13,035	2,723	786	27
Jefferson	18,205	4,452	1,454	32
Lewis	5,318	1,187	440	31
Livingston	10,002	1,759	553	23
Madison	12,759	2,223	597	22
Monroe	124,934	18,397	3,713	18
Montgomery	8,994	2,046	676	30
Nassau	218,319	13,280	3,686	8
Niagara	39,594	6,697	1,786	21
Oneida	44,927	9,086	2,860	27
Onondaga	82,516	14,470	2,795	21
Ontario	17,377	2,005	727	16
Orange	56,873	10,488	2,372	23
Orleans	8,060	1,702	414	26
Oswego	25,676	4,846	1,444	24
Otsego	9,368	1,928	705	28
Putnam	14,004	841	337	8
Rensselaer	26,949	4,052	1,189	19
Rockland	52,029	7,525	1,212	17
St. Lawrence	21,464	6,176	1,450	36
Saratoga	32,482	2,929	1,081	12
Schenectady	23,107	702	274	4
Schoharie	5,562	1,205	475	30
Schuyler	2,809	637	167	29
Seneca	5,870	832	379	21
Steuben	20,488	6,299	1,379	37
Suffolk	261,290	24,643	7,810	12
Sullivan	10,472	2,832	691	34
Tioga	10,199	1,978	660	26
Tompkins	12,850	2,437	565	23
Ulster	27,811	4,056	1,243	19
Warren	11,407	2,040	482	22
Washington	11,070	2,262	787	28
Wayne	18,274	2,783	808	20
Westchester	140,324	15,171	2,577	13
Wyoming	6,218	1,022	520	25
Yates	3,518	676	169	24

[1] Figures represent the number of children who have applied for and been accepted into the free/reduced price lunch program. Actual participation is lower because some eligible students do not take a meal each day (e.g., because they are absent from school or do not like the day's meal).

[2] Fall enrollment in both public and nonpublic schools for the 1985-86 school year. Total does not include students enrolled in Boards of Cooperative Educational Services (BOCES).

Sources: New York State Education Department, Information Center on Education, 1986a, 1986b; New York State Education Department, Child Nutrition Reimbursement Unit, 1987.

HEALTH INSURANCE

Health insurance improves access to health services. In families without health insurance, health care competes with other needs for a share of the household budget. In families with limited means, immediate needs take precedence over preventive care and the treatment of nonemergent illnesses. Numerous studies have shown that people with health insurance are more likely than those without it to obtain health services *(Berk et al., 1983; Blendon et al., 1986; DHHS, 1985b; Signalhealth, 1986).*

The federal Medicaid program, enacted to improve health care coverage for the poor, has increased the health care utilization of covered children. However, not all poor children are eligible for Medicaid because the income eligibility level for families usually falls below the poverty level. In general, families of four or more must be relatively poorer than smaller families to qualify for Medicaid coverage. In 1985, there were approximately 200,000 poor children (0-19 years) in New York State with no health insurance coverage* *(CCF, 1987b).*

National surveys have found that next to young adults (19-24 years), children are the group most likely to be uninsured *(McManus, 1986)*. Therefore, it can be inferred that relatively young women in their early childbearing years are among those with a high probability of having no health insurance coverage. Since they tend to delay prenatal care, women without health insurance place their babies at risk of death and low birth weight. Hospitals, of course, share the fiscal burden of uncompensated deliveries and the high cost of neonatal intensive care.

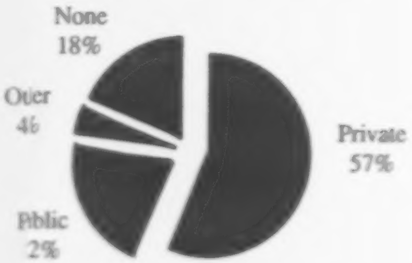
In New York State in 1984, private insurance was the expected source of payment for close to two-thirds of the reported hospital stays for obstetric discharge diagnoses (62%) and more than half of the nursery (53%) and pediatric (58%) discharge diagnoses. Medicaid was the expected payor for approximately one-quarter of obstetric (25%) and nursery (24%) discharges and fully one-third of pediatric (33%) discharges. Other sources, including patients themselves, were the expected source of reimbursement for the remaining hospital stays. However, many low-income families cannot afford the high cost of hospital care (*New York State Department of Health, Statewide Planning and Research Cooperative System [SPARCS], 1986*).

- In 1985, approximately 1.3 million, or 21 percent, of the state's children (0-19 years) were enrolled in New York's Medicaid program at some time during the year; 35 percent of all children in New York City were covered, as were 12 percent in the rest of the state (derived from Tables 1 and 15).
- Over 800,000 of New York State's children (0-19 years), nearly 18 percent, had no health insurance coverage in 1985 (*derived from Table 1 and Figure 10*).

** See Technical Note B for an explanation of the data source.*

Figure 10

Source of Health Insurance Coverage for Children (0-19 Years) New York State, 1985.

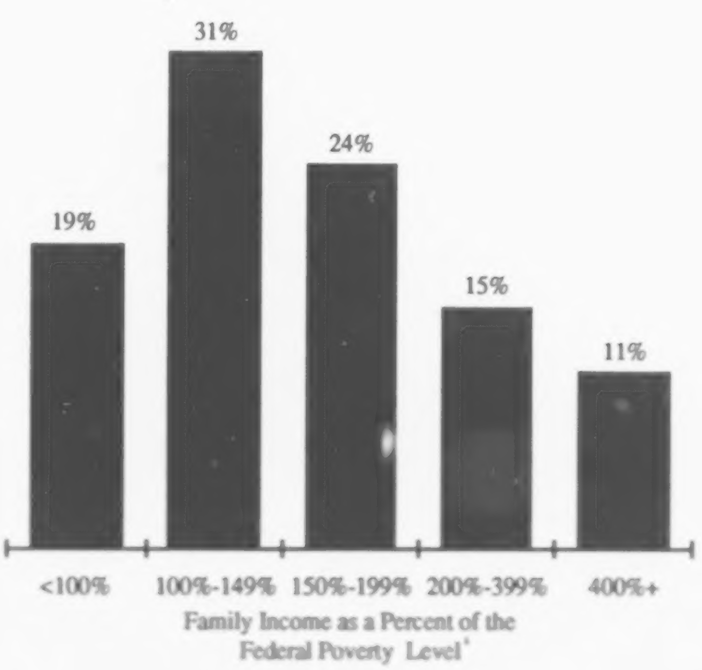


Note: Percentages do not sum to 100 due to rounding.

Source: New York State Council on Children and Families, 1987b.

Figure 11

Percentage of Children (0-19 Years) Without Health Insurance by Income Level New York State, 1985



[1] See Technical Note C for an explanation of these income categories.

Source: New York State Council on Children and Families, 1987b.

Table 15

MEDICAID: CHILDREN (0-19 YEARS) ENROLLED AND RECEIVING SERVICES, BY AGE 1985[1]

Age	Number of Children Enrolled[2]	Number Receiving Services[3]	Monthly Average # of Enrolled
	New York State[4]		
Total 0-19	1,293,218	1,075,163	1,011,058
0-4	439,173	366,640	318,074
5-9	327,950	279,581	272,956
10-14	262,072	217,045	218,809
15-19	264,023	211,897	201,219
	New York City		
Total 0-19	842,497	711,988	668,556
0-4	281,408	236,456	205,507
5-9	215,351	188,079	181,901
10-14	173,414	147,460	147,379
15-19	172,324	139,993	133,769
	Rest of State		
Total 0-19	447,722	360,448	340,501
0-4	157,750	130,170	112,553
5-9	112,429	91,340	90,933
10-14	88,039	69,023	70,984
15-19	89,504	69,915	66,032

[1] Statistics are for the federal fiscal year October 1, 1984, through September 30, 1985.

[2] The number of children who were enrolled in the Medicaid program at some time in fiscal year 1985.

[3] The total number of children who received services covered by Medicaid during fiscal year 1985.

[4] The numbers in the "New York City" and "Rest of the State" categories refer to children for whom local social services districts have fiscal responsibility. Children who have been in the care of facilities operated by the Office of Mental Retardation and Developmental Disabilities and the Office of Mental Health for 5 years or more are considered to be wards of the state. These children are included only in the New York State figures presented here. Consequently the sums of the New York City and rest of the state figures are less than the New York State totals.

Source: New York State Department of Social Services, Division of Medical Assistance, 1986.

Table 16

MEDICAID: CHILDREN (0-20 YEARS) ENROLLED AND RECEIVING SERVICES 1985[1]

County	Number of Children Enrolled[2]	Number Receiving Services[3]	Monthly Average # of Enrolled
New York State[4]	1,336,905	1,109,674	1,039,628
New York City	867,646	731,662	684,556
Rest of State	465,521	374,590	352,571
Albany	9,893	7,924	7,228
Allegany	4,436	3,632	3,278
Broome	9,153	7,401	6,536
Cattaraugus	5,595	4,533	4,099
Cayuga	4,508	3,738	3,418
Chautauqua	10,325	8,415	7,702
Chemung	7,235	5,939	5,409
Chenango	2,624	2,128	1,719
Clinton	4,334	3,538	3,133
Columbia	2,42	1,888	1,692
Cortland	3,57	2,915	2,607
Delaware	2,44	1,879	1,630
Dutchess	6,24	4,769	4,515
Erie	63,42	51,346	51,877
Essex	2,57	2,090	1,795
Franklin	3,50	2,908	2,574
Fulton	3,33	2,650	2,184
Genesee	2,26	1,782	1,579
Greene	1,73	1,421	1,142
Hamilton	30	225	192
Herkimer	3,40	2,634	2,394
Jefferson	6,50	5,090	4,831
Lewis	1,55	1,207	1,057
Livingston	1,83	1,530	1,293
Madison	2,91	2,269	1,998
Monroe	38,14	30,717	30,465
Montgomery	2,62	2,131	1,805
Nassau	22,4	17,975	17,158
Niagara	14,01	11,420	10,970
Oneida	15,94	12,796	12,197
Onondaga	23,6	18,698	18,610
Ontario	2,9	2,303	2,036
Orange	14,0	11,156	10,478
Orleans	2,5	2,060	1,782
Oswego	7,4	5,926	5,398
Otsego	3,0	2,350	2,109
Putnam	655	468	412
Rensselaer	6,094	4,960	4,450
Rockland	10,204	8,679	8,154
St. Lawrence	8,541	6,951	6,652
Saratoga	4,636	3,802	3,034
Schenectady	6,552	5,347	4,856
Schoharie	1,596	1,263	1,100
Schuyler	1,030	870	732
Seneca	1,202	909	784
Steuben	6,584	5,357	4,778
Suffolk	42,566	33,910	31,883
Sullivan	3,756	2,954	2,568
Tioga	2,709	2,114	1,861
Tompkins	3,633	3,043	2,627
Ulster	6,659	5,218	4,745
Warren	2,414	1,947	1,623
Washington	3,011	2,528	2,054
Wayne	3,408	2,686	2,341
Westchester	34,712	28,232	27,345
Wyoming	1,451	1,081	924
Yates	1,062	888	748

[1] Statistics are for the federal fiscal year October 1, 1984, through September 30, 1985.

[2] The number of children who were enrolled in the Medicaid program at some time in fiscal year 1985.

[3] The total number of children who received services covered by Medicaid during fiscal year 1985.

[4] The numbers in the "New York City" and "Rest of the State" categories refer to children for whom local social services districts have fiscal responsibility. Children who have been in the care of facilities operated by the Office of Mental Retardation and Developmental Disabilities and the Office of Mental Health for 5 years or more are considered to be wards of the state. These children are included only in the New York State figures presented here. Consequently the sums of the New York City and rest of the state figures are less than the New York State totals.

Source: New York State Department of Social Services, Division of Medical Assistance, 1985.

PRENATAL CARE *

Pregnancy-related health care provided to women from the time they become pregnant through labor and delivery is strongly associated with positive pregnancy outcomes, especially among poor and minority populations. Infants born to mothers who have had inadequate prenatal care are at increased risk of low birth weight, being stillborn, or dying before their first birthday. Recent research findings show that even when infants are born at low birth weight or require neonatal intensive care, those born to mothers who received prenatal care do better than those born to mothers who received no prenatal care *(Miller, Fine, Adams-Taylor, & Schorr, 1986).*

The 1990 objective for prenatal care nationwide established by the U.S. Public Health Service is that 90 percent of all pregnant women should obtain prenatal care within the first three months of pregnancy *(DHHS, 1980).* In 1985, New York State was still far from this objective; only 69 percent of all mothers received prenatal care during their first trimester of pregnancy.

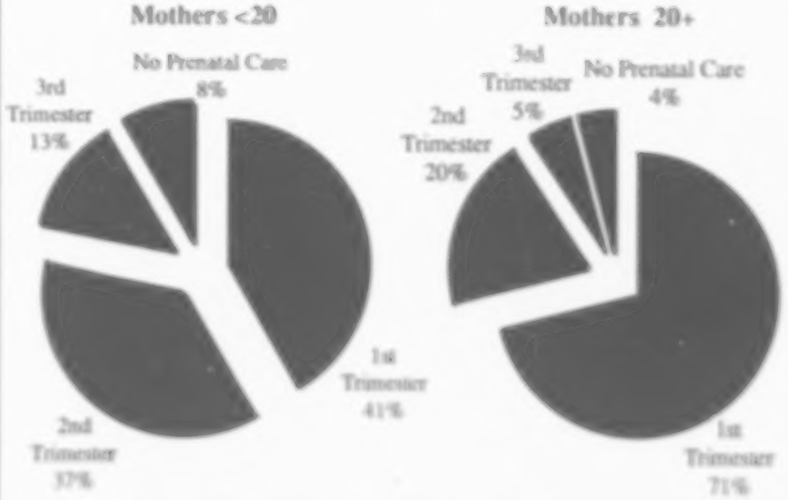
- In 1985 in New York State, 68.5 percent of babies were born to mothers who had received prenatal care during the first three months of pregnancy *(Table 17).* The national average in 1983 was 76.2 percent *(Hughes, Johnson, Simons, & Rosenbaum, 1986).*

- Adolescents were more likely than older women to receive late or no prenatal care. In 1985, in New York State, 21 percent of the infants were born to adolescent mothers who received no prenatal care at all or did not receive care until the third trimester of pregnancy (compared with 9% born to mothers aged 20 or over) *(Figure 12).* The proportions were 34 percent and 18 percent in New York City and 10 percent and 2 percent in the rest of the state *(DOH, Bureau of Biostatistics, 1986).*

- Nonwhite women were more likely than white women to receive late or no prenatal care. In 1985, 19 percent of nonwhite women in New York State received late or no prenatal care, as compared with 7 percent of white women *(DOH, Bureau of Biostatistics, 1986).*

Figure 12

Entry into Prenatal Care:
Percentage of Live Births by Maternal Age
New York State, 1985



Note: Percentages may not sum to 100 due to rounding.

Source: New York State Department of Health, Bureau of Biostatistics, 1986.

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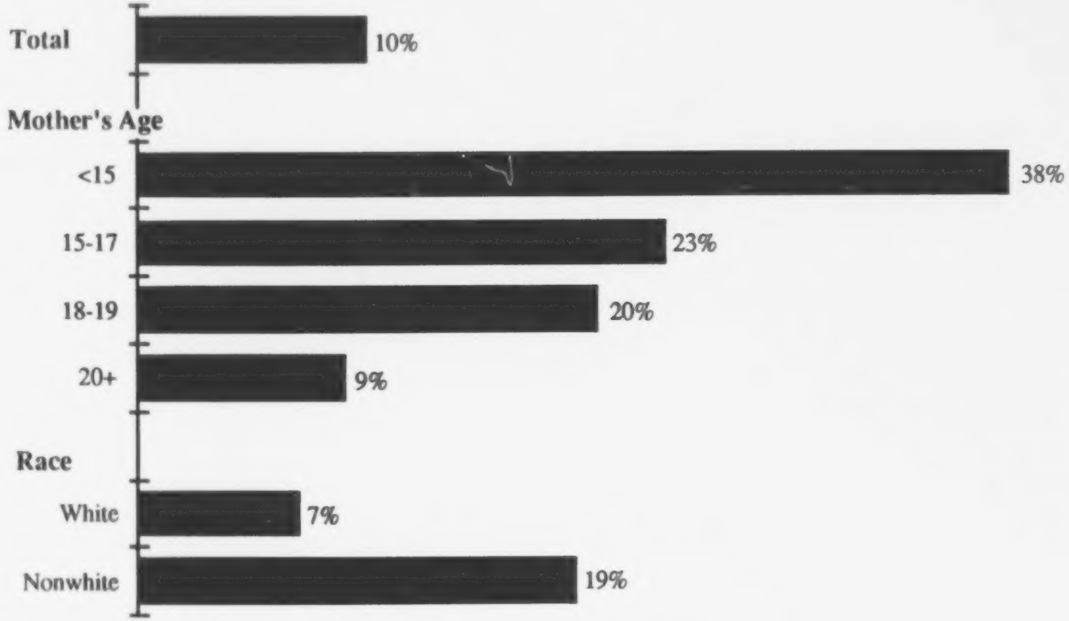
* *The American College of Obstetrics and Gynecology recommends the following schedule of prenatal care as a minimum: one health care visit in the first 13 weeks of pregnancy, one visit per month until the 28th week, one visit every 2 weeks until the 36th week, and weekly visits thereafter until delivery.*

Figure 13

Percentage of Live Births to Mothers with Late* or No Prenatal Care
New York State, 1985



* "Late prenatal care" is defined here as care first received in the third trimester of pregnancy.

Source: New York State Department of Health, Bureau of Biostatistics, 1986.

Table 17

EARLY[1] ENTRY INTO PRENATAL CARE BY RACE: NUMBER AND RATE[2] PER 100 LIVE BIRTHS

1985

County	Total		White		Nonwhite	
	Number	Rate	Number	Rate	Number	Rate[3]
New York State	168,842	68.5	139,496	75.4	28,516	47.5
New York City	51,876	49.3	33,568	55.9	17,902	40.4
Bronx	8,002	38.5	4,603	39.6	3,344	37.1
Kings	18,037	49.0	10,839	57.3	7,057	40.2
New York	8,245	45.7	5,726	53.9	2,388	33.5
Queens	14,236	57.7	9,386	63.7	4,774	48.8
Richmond	3,356	68.2	3,014	73.3	339	42.3
Rest of State	116,966	82.8	105,928	84.8	10,614	67.3
Albany	3,062	87.3	2,614	89.5	315	72.7
Allegany	529	80.0	526	80.3	3	50.0
Broome	2,015	69.5	1,936	69.9	76	60.3
Cattaraugus	1,058	76.7	1,004	76.8	54	74.0
Cayuga	916	79.8	877	79.9	39	76.5
Chautauqua	1,747	84.4	1,700	84.7	45	72.6
Chemung	970	74.7	913	75.0	57	70.4
Chenango	544	77.5	538	77.5	5	71.4
Clinton	1,209	86.7	1,147	86.8	59	85.5
Columbia	624	81.0	582	81.9	29	64.4
Cortland	507	77.3	506	77.6	1	25.0
Delaware	490	82.1	485	82.1	5	100.0
Dutchess	2,610	85.4	2,341	87.3	265	72.0
Erie	11,141	84.8	9,606	87.9	1,528	69.3
Essex	381	77.4	377	77.7	4	57.1
Franklin	434	68.9	411	69.8	23	56.1
Fulton	550	78.7	541	79.1	7	58.3
Genesee	701	76.4	673	76.7	28	70.0
Greene	404	77.1	391	78.0	9	47.4
Hamilton	39	72.2	39	72.2	0	***.*
Herkimer	701	78.8	696	78.7	5	83.3
Jefferson	1,168	84.0	1,136	84.1	32	82.1
Lewis	344	86.4	344	86.4	0	***.*
Livingston	640	83.0	634	83.1	5	83.3
Madison	751	80.8	743	80.8	8	80.0
Monroe	8,897	84.2	7,414	87.6	1,468	70.6
Montgomery	519	79.6	513	80.0	6	54.5
Nassau	13,143	87.3	11,678	91.0	1,449	66.0
Niagara	2,668	85.1	2,443	86.9	225	69.7
Oneida	2,804	77.4	2,648	78.9	153	58.2
Onondaga	6,366	86.6	5,567	88.6	797	74.9
Ontario	1,074	84.3	1,048	85.0	26	63.4
Orange	3,087	71.4	2,818	74.5	260	49.1
Orleans	513	84.1	484	85.4	29	67.4
Oswego	1,511	84.0	1,498	84.3	13	65.0
Otsego	605	83.9	588	83.9	15	83.3
Putnam	1,018	91.8	988	92.0	23	82.1
Rensselaer	1,712	83.7	1,601	84.8	69	61.1
Rockland	2,812	76.7	2,389	79.6	409	62.9
St. Lawrence	1,165	78.3	1,140	78.1	25	86.2
Saratoga	2,023	88.1	1,971	88.4	34	73.9
Schenectady	1,798	88.7	1,660	89.4	122	79.2
Schoharie	278	77.7	274	77.8	2	50.0
Schuyler	155	74.9	154	75.1	1	50.0
Seneca	382	75.6	371	75.9	11	68.8
Steuben	1,184	82.5	1,157	82.5	27	84.4
Suffolk	14,114	83.9	13,094	86.8	984	59.0
Sullivan	670	69.5	629	71.6	40	47.1
Tioga	591	75.6	583	75.8	7	58.3
Tompkins	909	82.0	844	83.2	64	68.1
Ulster	1,781	85.4	1,693	86.7	85	65.9
Warren	599	78.5	588	78.7	7	63.6
Washington	536	72.1	533	72.3	3	50.0
Wayne	1,118	78.3	1,074	80.0	44	51.2
Westchester	8,746	84.0	7,076	88.2	1,611	69.8
Wyoming	450	78.3	449	78.2	1	100.0
Yates	203	70.5	201	70.5	2	66.7

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[1] Prenatal care that began within the first three months of pregnancy.

[2] The rate is based on the total number of live births minus the number of births for which date of entry into prenatal care is unknown.

[3] "***.*" indicates that a rate could not be calculated because there were no births to mothers in this racial group.

Source: New York State Department of Health, Bureau of Biostatistics, 1986.

Table 18

EARLY[1] ENTRY INTO PRENATAL CARE BY MATERNAL AGE: NUMBER AND RATE[2] PER 100 LIVE BIRTHS

1985

	10 - 14		15 - 17		18 - 19		20+	
County	Number	Rate[3]	Number	Rate	Number	Rate	Number	Rate
New York State	117	25.9	3,097	36.9	6,810	44.4	158,805	71.5
New York City	51	20.3	1,078	24.9	2,054	28.2	48,690	52.2
Bronx	19	21.6	271	22.2	474	23.8	7,237	41.4
Kings	21	24.1	522	30.8	889	32.6	16,604	51.4
New York	8	17.0	129	18.8	280	23.8	7,828	48.5
Queens	3	11.5	129	20.5	349	28.8	13,754	60.3
Richmond	0	0.0	27	27.3	62	33.7	3,267	70.5
Rest of State	66	33.0	2,019	49.7	4,756	59.0	110,115	85.5
Albany	3	42.9	63	56.8	147	65.3	2,849	90.0
Allegany	0	***.*	12	50.0	34	66.7	483	82.4
Broome	0	0.0	28	34.6	74	41.3	1,913	72.5
Cattaraugus	1	100.0	34	56.7	96	67.1	927	78.8
Cayuga	1	33.3	24	55.8	62	59.0	829	83.1
Chautauqua	2	66.7	39	61.9	103	73.0	1,603	86.0
Chemung	1	25.0	31	44.9	44	47.3	894	79.0
Chenango	0	***.*	13	43.3	40	70.2	491	79.8
Clinton	0	***.*	22	53.7	92	79.3	1,095	88.5
Columbia	0	***.*	12	35.3	40	69.0	572	84.4
Cortland	0	***.*	12	52.2	37	66.1	458	79.4
Delaware	0	***.*	14	50.0	27	56.3	449	86.2
Dutchess	2	50.0	22	44.0	60	48.0	2,526	87.8
Erie	12	35.3	249	49.5	506	62.2	10,373	88.0
Essex	0	***.*	13	46.4	28	66.7	340	80.6
Franklin	0	0.0	14	45.2	41	50.6	379	73.3
Fulton	0	***.*	22	57.9	44	58.7	484	82.6
Genesee	0	0.0	14	48.3	38	55.1	649	79.2
Greene	0	0.0	8	36.4	20	60.6	376	80.3
Hamilton	0	***.*	1	33.3	1	100.0	37	74.0
Herkimer	1	100.0	20	66.7	40	61.5	640	80.6
Jefferson	0	***.*	48	69.6	92	74.8	1,028	85.8
Lewis	0	***.*	8	61.5	32	80.0	304	88.1
Livingston	1	100.0	10	55.6	28	60.9	601	85.1
Madison	0	0.0	16	47.1	32	52.5	702	84.4
Monroe	12	48.0	194	55.7	370	60.8	8,320	86.8
Montgomery	0	***.*	16	76.2	24	60.0	479	81.0
Nassau	2	18.2	92	39.1	256	56.0	12,791	89.2
Niagara	2	33.3	64	56.6	137	61.7	2,465	88.2
Oneida	1	16.7	68	52.7	156	53.4	2,579	80.7
Onondaga	6	46.2	149	53.4	311	65.9	5,900	89.6
Ontario	1	50.0	13	46.4	50	72.5	1,010	86.0
Orange	2	28.6	50	33.3	117	43.7	2,918	74.8
Orleans	1	50.0	13	48.1	40	71.4	459	87.4
Oswego	1	50.0	43	68.3	87	64.9	1,380	86.3
Otsego	0	***.*	9	81.8	32	76.2	564	84.4
Putnam	0	***.*	2	50.0	13	68.4	1,003	92.4
Rensselaer	1	33.3	38	60.3	84	57.5	1,589	82.2
Rockland	0	0.0	16	33.3	48	40.3	2,748	78.5
St. Lawrence	1	25.0	23	46.0	84	66.1	1,057	80.9
Saratoga	1	33.3	25	49.0	97	74.6	1,900	90.0
Schenectady	1	33.3	35	67.3	74	67.9	1,688	90.6
Schoharie	0	***.*	3	37.5	13	50.0	262	80.9
Schuyler	0	***.*	5	45.5	10	62.5	140	77.8
Seneca	0	***.*	8	66.7	25	58.1	349	77.6
Steuben	1	25.0	50	74.6	105	69.5	1,028	84.7
Suffolk	5	29.4	117	37.7	320	47.0	13,669	86.5
Sullivan	0	0.0	13	34.2	32	50.8	625	72.5
Tioga	0	***.*	13	43.3	46	76.7	532	76.9
Tompkins	0	***.*	20	55.6	23	53.5	866	84.1
Ulster	0	0.0	31	58.5	80	67.2	1,670	87.4
Warren	0	0.0	15	50.0	24	46.2	559	82.3
Washington	0	0.0	15	46.9	46	48.9	475	77.1
Wayne	1	33.3	19	43.2	47	45.6	1,051	82.2
Westchester	3	18.8	100	46.1	207	52.9	8,435	86.2
Wyoming	0	***.*	8	40.0	28	65.1	414	80.9
Yates	0	***.*	3	42.9	12	75.0	188	70.9

[1] Prenatal care that began within the first three months of pregnancy.

[2] The rate is based on the total number of live births minus the number of births for which date of entry into prenatal care is unknown.

[3] "***.*" indicates that a rate could not be calculated because there were no births to mothers in this age group. "0.0" means that there were births, but none received early prenatal care.

Source: New York State Department of Health, Bureau of Biostatistics, 1986.

IMMUNIZATION STATUS

Immunity to disease is the ability of an individual to resist infection and may be inferred through artificial immunization or through previous natural infection (Miller et al., 1986, p. 48).

Immunization status is an important health indicator because it is so closely linked to rates of specific childhood diseases — diseases that cause disability or death. The following seven childhood diseases are preventable with proper immunization: diphtheria, pertussis, tetanus, measles, mumps, rubella, and polio.

Nationally, children between the ages of five and six years have the highest immunization rates, and children between one and four years of age have the lowest rate *(Miller et al., 1986)*. Immunization rates are generally lower for children who are nonwhite, poor, and living in inner cities. A notable exception is the Head Start program population, which has above-average immunization rates.

Under New York State Law, immunization of young children is mandated; however, this law is not easily enforced. By requiring up-to-date immunization status for entry into day care centers and elementary schools, New York has improved its immunization levels *(Lash, Sigal, & Dudzinski, 1980)*.

During the 1985-86 school year, 95 percent of New York State's preschool and school-age children were fully immunized. Thus, New York State had achieved the Public Health Service objectives for the nation for these children. Data about immunization of children in day care and children by age two as noted in the following objectives were unavailable.

- *By 1990, at least 90 percent of all children should have completed their basic immunization series by age two — measles, mumps, rubella, polio, diphtheria, pertussis, and tetanus.*

- *By 1990, at least 95 percent of all children attending licensed day care facilities and kindergarten through 12th grade should be fully immunized (DHHS, 1980).*

Immunization rates for all children were slightly lower in New York City (94%) than the rest of the state (96%). (Contributing to this discrepancy was New York City's large number of children with factors associated with lack of immunization — poverty, nonwhite race, and recent arrival from a less developed country.) In the more densely populated counties, immunization rates for students in special education classes tended to be lower than those for students in regularly graded classes *(Table 19)*.

- The impact of immunization on the reduction of communicable diseases in New York State has been startling. Between 1970 and 1985, the rate of measles plummeted from 74.7 (per 100,000) to 2.8; the rate of rubella decreased from 55.1 (per 100,000) to 0.5; and mumps declined from 14.1 (per 100,000) to 4.3. The only increase was in whooping cough, from 2.3 to 2.9 cases per 100,000 *(CCF, 1983; DOH, Bureau of Communicable Disease Control, 1987)*. *(See Table 40 for the incidence of immunizable diseases in New York in 1985.)*

Table 19

PERCENTAGE OF CHILDREN ENTERING SCHOOL FULLY IMMUNIZED BY GRADE LEVEL

1985-1986

County	All Students	Prekindergarten	Kindergarten	1-6	7-12	Special Education
New York State	95%	95%	98%	95%	93%	89%
New York City	94	96	96	94	92	86
Bronx	92	98	97	93	87	75
Kings	91	97	96	88	82	83
New York	89	97	95	84	86	86
Queens	95	95	95	96	94	87
Richmond	97	95	98	97	96	96
Rest of State	96	95	98	97	95	90
Albany	97	93	99	98	97	96
Allegany	99	97	99	98	98	100
Broome	97	94	99	98	98	96
Cattaraugus	96	94	98	95	98	85
Cayuga	97	96	98	97	98	100
Chautauqua	96	96	98	97	92	87
Chemung	98	95	99	99	97	98
Chenango	98	98	98	98	96	98
Clinton	98	98	99	98	97	97
Columbia	95	93	97	94	93	100
Cortland	97	97	98	98	95	99
Delaware	96	98	99	97	97	37
Dutchess	97	95	99	99	97	98
Erie	94	95	98	91	91	86
Essex	99	99	100	99	97	100
Franklin	98	98	99	99	97	97
Fulton	93	100	99	99	90	65
Genesee	97	94	99	99	98	96
Greene	97	96	96	99	99	95
Hamilton[1]	100	0	100	100	100	100
Herkimer	98	98	98	98	96	97
Jefferson	98	96	98	99	97	100
Lewis	98	97	99	100	97	100
Livingston	97	93	99	98	97	100
Madison	97	94	98	97	96	94
Monroe	96	93	99	98	97	91
Montgomery	98	97	98	98	97	91
Nassau	97	98	98	96	96	92
Niagara	98	97	99	99	97	97
Oneida	96	92	99	98	96	91
Onondaga	96	92	99	98	98	94
Ontario	96	92	99	99	97	100
Orange	95	87	98	98	94	93
Orleans	98	93	99	100	99	97
Oswego	98	97	99	99	98	94
Otsego	97	92	99	98	98	100
Putnam	97	96	99	98	94	89
Rensselaer	98	94	99	99	99	97
Rockland	94	96	98	95	89	78
St. Lawrence	92	93	99	99	96	77
Saratoga	98	97	99	98	98	100
Schenectady	98	96	99	98	98	100
Schoharie	97	98	99	99	98	68
Schuyler	97	96	99	94	96	100
Seneca	98	95	99	98	97	100
Steuben	98	94	99	98	98	100
Suffolk	96	93	98	98	96	94
Sullivan	95	92	97	96	93	96
Tioga	98	94	99	100	99	100
Tompkins	94	90	98	97	96	93
Ulster	96	92	98	97	96	96
Warren	99	95	99	99	99	100
Washington	98	97	98	100	98	100
Wayne	95	88	99	98	98	100
Westchester	96	96	98	95	93	87
Wyoming	98	97	99	99	97	100
Yates	96	96	97	96	96	100

[1] There were no prekindergarten students in Hamilton County.

Source: New York State Department of Health, Bureau of Communicable Disease Control, 1986b.

DENTAL STATUS

Oral diseases are the most prevalent chronic health problem affecting the child population. The consequences of dental disease include pain, infection, inability to concentrate on learning, school absence, and premature loss of teeth. Decayed, discolored, or missing teeth also detract from appearance and may lower self-esteem (*Citizens' Committee for Children, 1986*).

Overall, the prevalence of dental decay has decreased markedly in the United States. There was a 32 percent decrease in the number of decayed teeth in schoolchildren (5-17 years) between the 1971-74 and 1979-80 National Health Surveys. Decreases in dental decay have been attributed largely to fluoridation of public water supplies together with fluoride toothpaste, topical fluoride application, and improved oral hygiene *(Brunelle & Carlos, 1982)*.

The prevalence of dental disease varies in different population groups. National and state statistics show that the average number of decayed teeth increases as household income and education decrease. Blacks have higher rates of decayed and missing teeth and lower rates of filled teeth than whites. Utilization of dental services is positively correlated with income and educational attainment. Immigrant children who have not had the benefit of fluoridated water supplies have also been found to have a higher need for dental care (*DHHS, 1985a; Leeds, Pirani, & Colchamiro, 1987; Rebich, Kumar, & Brustman, 1983*).

In New York State, oral health status and treatment needs are determined by periodic examination surveys in which the numbers of decayed, missing, and filled teeth or tooth surfaces are counted and reported as an index. Data from New York City and the rest of the state are collected separately during different time periods and are not comparable. New York City uses an index based on the number of permanent teeth (DMFT), whereas elsewhere in the state the index is based on the number of tooth surfaces (DMFS). Furthermore, the New York City data are categorized by the child's age, whereas the state data are categorized by the child's grade in school. The latest available data from New York City were gathered in 1983 by the New York City Health Department as part of the School Health Assessment, Planning, and Evaluation (SHAPE) project, which screened a sample of 3,095 schoolchildren. Data from the rest of the state were collected in 1979-80 by the New York State Department of Health's Oral Health and Treatment Assessment Survey of 1,809 children.

Table 20

AVERAGE NUMBER OF DECAYED, MISSING, AND FILLED TEETH (DMFT) PER CHILD AND PERCENTAGE FILLED,[1] BY CHILD'S AGE NEW YORK CITY, 1979-1980

Child's Age	DMFT	Percentage Filled	Child's Age	DMFT	Percentage Filled
5	0.3	67%	12	3.8	45%
6	0.5	100	13	4.7	51
7	1.4	86	14	5.5	38
8	1.4	64	15	4.9	25
9	1.6	69	16	6.4	30
10	2.2	46	17	6.8	35
11	3.0	43			

[1] The percentage filled is an indication of service utilization. The obverse is an indication of unmet need (i.e. 100% - % filled = % decayed or missing).

Source: New York City Department of Health, 1984.

Table 21

AVERAGE (WEIGHTED) NUMBER OF DECAYED, MISSING, AND FILLED TOOTH SURFACES (DMFS) PER CHILD AND PERCENTAGE FILLED,[1] BY GRADE LEVEL AND SOCIOECONOMIC STATUS[2]

1979-1980

	2nd Grade		5th Grade		8th Grade		11th Grade	
Socioeconomic Status (SES)	DMFS	Percentage Filled	DMFS	Percentage Filled	DMFS	Percentage Filled	DMFS	Percentage Filled
New York State Excluding New York City[3]								
Low	1.8	44%	4.6	58%	10.2	69%	13.0	72%
Medium	1.2	71	2.9	74	5.3	75	11.3	87
High	0.6	78	3.2	89	4.8	92	11.8	88
Western HSA								
Low	1.9	77%	6.1	35%	10.9	57%	11.0	74%
Medium	1.2	38	4.4	42	2.7	75	6.6	83
High	0.4	50	2.8	82	0.0	0	6.9	99
Finger Lakes HSA								
Low	5.6	33%	2.9	91%	6.7	77%	14.3	82%
Medium	2.0	93	2.8	70	6.0	53	8.6	95
High	0.9	45	2.5	66	5.4	91	8.6	83
Central HSA								
Low	0.0	0%	4.5	43%	12.1	65%	0.0	0%
Medium	1.0	34	3.5	72	7.1	63	7.4	81
High	1.9	75	5.3	63	4.1	71	11.1	97
Southern Tier HSA								
Low	2.5	76%	5.8	74%	10.8	34%	17.3	66%
Medium	1.2	42	4.6	47	3.5	86	12.1	74
High	1.0	44	2.6	69	4.7	73	11.0	65
Northeastern HSA								
Low	0.8	47%	4.6	78%	13.2	87%	13.3	67%
Medium	1.6	74	2.6	65	9.7	76	13.9	58
High	0.7	100	2.2	100	4.4	83	6.9	94
Hudson Valley HSA								
Low	2.7	21%	1.9	92%	6.8	63%	13.5	63%
Medium	1.4	70	1.9	100	6.8	70	12.5	98
High	0.5	92	3.4	49	5.2	98	9.9	95
Nassau-Suffolk HSA								
Low	1.5	31%	3.9	95%	3.4	72%	12.9	80%
Medium	0.7	94	2.4	100	3.8	99	14.1	93
High	0.3	100	3.1	98	4.5	93	14.7	84

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[1] The percentage filled is an indication of service utilization. The obverse is an indication of unmet need (i.e. 100% - % filled = % decayed or missing).

[2] See Technical Note D for the definition of socioeconomic status used by the Bureau of Dental Health.

[3] Comparable data for New York City are not available. See Technical Note E for the counties included in each of the Health Service Areas (HSAs) in this table.

Source: New York State Department of Health, Bureau of Dental Health [Results of the Oral Health and Treatment Assessment Survey conducted in 1979-80], 1986.

PREGNANCIES AND BIRTHS

Although pregnancy is a natural human condition, it can result in health problems for some women, particularly those at the beginning and end of their childbearing years. Studies of adolescent pregnancy and childbirth have indicated that pregnant teenagers, particularly those younger than 15 years, have higher-than-average rates of complications, maternal morbidity and mortality, and premature and/or low birth weight babies. Teenagers are also more likely than adult women to experience stillbirths and miscarriages. Research has indicated, however, that medical problems associated with adolescent pregnancy can be greatly reduced through prenatal care and good nutrition *(Hayes, 1987)*. For older women, biological factors appear to play an important role in increasing the risk of pregnancy complications and poor pregnancy outcomes; but income level, quality of medical care, and maternal health are key determinants of the level of risk *(Nortman, 1974)*.

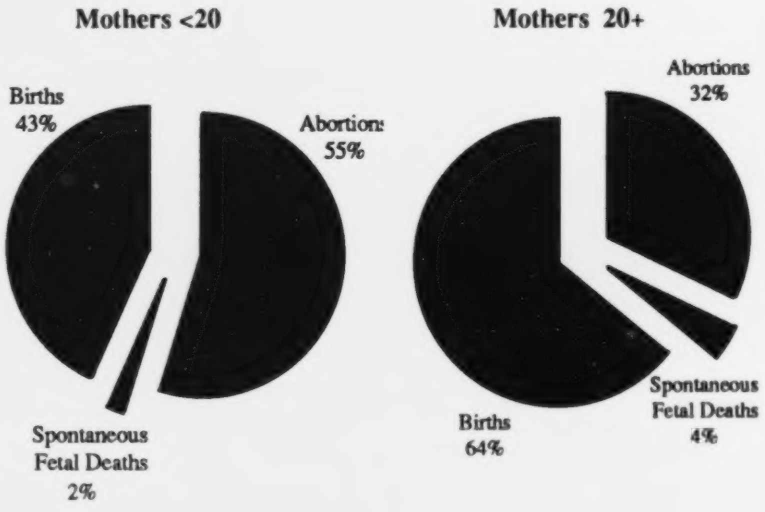
If a woman is unwilling or unable to assume the responsibilities of raising a child, an unplanned pregnancy can be a traumatic event for the woman and her family, and it can have long-term social and economic consequences if the pregnancy results in a birth.

The number of births in a given community is one of three factors (deaths and migration are the other two) that determine the population size of the community. In lieu of census counts, the number of births provides one means of verifying the accuracy of population projections for a given year. Planners and policy makers need to monitor the size of birth cohorts in order to ensure that community service systems (e.g., health, school, and social services) will be adequate to the needs of the population.

The number of births also provides the base for calculating the rates of such infant health indicators as low birth weight and prematurity. These indicators provide communities with valuable measures of infant health status; however, communities with a small number of births may experience wide fluctuations in their rates of low birth weight and prematurity due to chance alone and should use caution in interpreting such changes.

Figure 14

Reported Pregnancy Outcomes by Maternal Age New York State, 1985



Source: New York State Department of Health, Bureau of Biostatistics, nd.

105

106

Table 22

REPORTED PREGNANCIES AND OUTCOMES
1985

County	Pregnancies[1]	Live Births	Induced Abortions	Spontaneous Fetal Deaths[2]
New York State	422,855	61%	35%	4%
New York City	213,701	53	44	3
Bronx	42,729	51	48	1
Kings	79,486	52	45	3
New York	37,880	51	47	3
Queens	45,504	58	39	3
Richmond	8,102	62	32	7
Rest of State	209,154	69	26	5
Albany	5,284	72	22	6
Allegany	856	78	15	7
Broome	4,154	71	25	4
Cattaraugus	1,777	79	15	7
Cayuga	1,409	82	16	2
Chautauqua	2,870	73	22	6
Chemung	1,685	78	17	6
Chenango	895	79	16	5
Clinton	1,495	94	4	2
Columbia	1,004	79	15	6
Cortland	956	69	27	4
Delaware	767	79	14	7
Dutchess	4,422	74	19	7
Erie	20,809	65	31	4
Essex	564	91	7	1
Franklin	708	91	8	1
Fulton	983	71	24	5
Genesee	1,129	83	16	2
Greene	718	75	21	4
Hamilton	69	80	13	7
Herkimer	1,180	76	21	3
Jefferson	1,550	90	3	7
Lewis	470	86	6	9
Livingston	1,025	78	18	4
Madison	1,229	76	19	5
Monroe	15,015	74	22	4
Montgomery	913	72	23	4
Nassau	25,195	61	34	6
Niagara	4,406	72	21	7
Oneida	4,909	75	20	5
Onondaga	9,961	74	22	4
Ontario	1,637	80	17	3
Orange	5,585	79	18	3
Orleans	816	76	16	8
Oswego	2,203	82	16	2
Otsego	911	80	13	7
Putnam	1,407	82	17	1
Rensselaer	2,810	78	16	6
Rockland	5,868	64	31	5
St. Lawrence	1,794	85	12	2
Saratoga	2,987	79	15	6
Schenectady	3,057	68	23	9
Schoharie	501	74	22	4
Schuyler	278	75	18	7
Seneca	572	89	10	2
Steuben	1,689	85	11	3
Suffolk	30,309	58	37	5
Sullivan	1,282	76	21	4
Tioga	954	83	15	2
Tompkins	1,843	60	33	7
Ulster	3,013	70	23	6
Warren	913	85	13	2
Washington	867	90	9	1
Wayne	1,785	81	14	5
Westchester	16,584	64	33	3
Wyoming	728	80	16	3
Yates	354	82	13	5

[1] The number of pregnancies is the sum of all known live births, induced abortions, and spontaneous fetal deaths (all gestations).

[2] Includes all gestations.

Note: Percentages may not sum to 100 due to rounding.

Source: New York State Department of Health, Bureau of Biostatistics, nd.

Table 23

LIVE BIRTHS BY RACE AND MATERNAL AGE
1985

County	Total[1]	Race		Maternal Age			
		White	Nonwhite	10-14	15-17	18-19	20+
New York State	258,826	190,487	65,899	503	9,008	16,462	232,806
New York City	113,784	63,058	49,507	290	4,800	8,132	100,541
Bronx	21,774	12,111	9,504	94	1,285	2,115	18,273
Kings	41,635	20,379	20,858	110	1,979	3,204	36,335
New York	19,187	11,077	7,654	52	726	1,272	17,135
Queens	26,186	15,318	10,671	31	708	1,354	24,088
Richmond	5,002	4,173	820	3	102	187	4,710
Rest of State	145,042	127,429	16,392	213	4,208	8,330	132,265
Albany	3,824	3,093	461	9	135	250	3,429
Allegany	671	665	6	0	24	51	596
Broome	2,945	2,809	129	2	84	183	2,676
Cattaraugus	1,400	1,326	73	1	63	147	1,189
Cayuga	1,155	1,103	51	3	43	107	1,001
Chautauqua	2,084	2,020	62	4	63	141	1,876
Chemung	1,308	1,227	81	4	69	94	1,141
Chenango	706	698	7	0	30	57	619
Clinton	1,411	1,337	71	0	41	119	1,251
Columbia	796	730	47	0	36	60	700
Cortland	658	654	4	0	23	56	579
Delaware	603	597	5	0	29	48	526
Dutchess	3,275	2,863	406	4	54	142	3,073
Erie	13,567	11,175	2,381	36	527	856	12,145
Essex	516	508	7	0	29	44	443
Franklin	645	601	43	1	31	82	531
Fulton	700	685	12	0	38	75	587
Genesee	934	892	41	1	29	70	834
Greene	542	516	20	1	23	34	484
Hamilton	55	55	0	0	3	1	51
Herkimer	896	890	6	1	30	65	800
Jefferson	1,393	1,354	39	0	69	124	1,200
Lewis	402	402	0	0	13	40	349
Livingston	802	793	7	1	19	47	735
Madison	934	923	10	1	34	61	837
Monroe	11,092	8,848	2,214	31	377	643	10,040
Montgomery	661	649	11	0	23	40	598
Nassau	15,247	12,975	2,239	11	238	462	14,534
Niagara	3,172	2,841	330	6	116	225	2,825
Oneida	3,661	3,388	268	6	131	295	3,229
Onondaga	7,382	6,299	1,078	13	281	475	6,613
Ontario	1,304	1,262	42	2	29	71	1,202
Orange	4,406	3,839	551	7	152	273	3,974
Orleans	617	574	43	2	27	56	532
Oswego	1,801	1,781	20	2	63	134	1,602
Otsego	731	711	18	0	12	43	676
Putnam	1,150	1,107	30	0	4	19	1,127
Rensselaer	2,186	1,999	117	3	67	154	1,961
Rockland	3,734	3,049	666	1	52	120	3,561
St. Lawrence	1,531	1,483	29	4	51	131	1,340
Saratoga	2,358	2,274	47	3	53	135	2,167
Schenectady	2,068	1,889	156	3	53	111	1,901
Schoharie	369	360	4	0	8	27	334
Schuyler	208	206	2	0	11	16	181
Seneca	507	491	16	0	12	43	452
Steuben	1,443	1,410	33	4	67	151	1,221
Suffolk	17,620	15,412	1,729	19	328	753	16,515
Sullivan	972	884	87	1	39	63	869
Tioga	796	783	12	0	30	60	706
Tompkins	1,113	1,018	94	0	36	43	1,034
Ulster	2,121	1,987	131	2	54	122	1,943
Warren	775	758	11	1	30	54	689
Washington	779	773	6	1	32	97	649
Wayne	1,446	1,359	87	3	46	103	1,294
Westchester	10,694	8,232	2,348	16	220	398	10,057
Wyoming	586	585	1	0	20	43	523
Yates	290	287	3	0	7	16	267

[1] Total includes births for which the race and maternal age are not reported.

Source: New York State Department of Health, Bureau of Biostatistics, nd.

LOW BIRTH WEIGHT AND PREMATURE BIRTHS

Infants weighing less than 2,500 grams (5.5 pounds) at birth are considered to be of low birth weight.* Babies weighing less than 1,500 grams (3.0 pounds) at birth are categorized as very low birth weight infants. Infants having less than 37 weeks gestation are considered to be premature.

Low birth weight data are sometimes presented separately for infants who are born prematurely and those who are full-term but small for gestational age (SGA). Such a distinction is useful because the factors that contribute to low birth weight and infant outcomes tend to differ for these two groups. Infants born prematurely are at greatest risk of death in the neonatal period, whereas SGA infants are more likely to have congenital anomalies and developmental disabilities than are surviving pre-term infants whose weight was appropriate for date *(Alberman, 1984; Institute of Medicine, 1985)*.

National statistics indicate that two-thirds of all infants dying during the neonatal period (the first 28 days of life) were low birth weight infants, as were 60 percent of all those dying before their first birthday *(DHHS, 1986)*.

Low birth weight children are also at higher risk than others of mental retardation, birth defects, growth and developmental problems, visual and hearing defects, delayed speech, autism, cerebral palsy, epilepsy, learning problems, and chronic lung problems *(Miller et al., 1986)*. Since these infants are often kept in special neonatal care units after the mother leaves the hospital, mother and baby may fail to establish a close attachment during the first weeks of life; this failure, combined with the added physical and psychological stress placed on parents of such babies, increases the risk of abuse or neglect *(Bittner & Newberger, 1981)*.

A community's rate of low birth weight reflects social, economic, and health care delivery conditions as well as personal health habits. Increased risk of low birth weight has been associated with low socioeconomic and educational status, very young or advanced maternal age, lack of access to early and continuous prenatal care, and poor nutrition during pregnancy. Although the reasons are not clear, blacks in the United States have a higher risk of low birth weight even when other social factors are equal. Research has also linked maternal smoking and use of alcohol and drugs to low birth weight. Other maternal factors correlated with low birth weight include high parity, short intervals between pregnancies, and previous unfavorable outcomes *(DHHS, 1980, 1986; Institute of Medicine, 1985; Miller et al., 1986)*.

One yardstick for measuring the state's progress in infant health is the national low birth weight objectives set by the Public Health Service:

- *By 1990, low birth weight babies (2,500 grams and under) should constitute no more than five percent of all live births.*
- *By 1990, no county and no racial or ethnic group of the population should have a rate of low birth weight infants that exceeds nine percent of all live births (DHHS, 1980).*

In 1985, 18,088 babies (7%) born in New York State weighed less than 2,500 grams, and 1 percent (3,352 babies) weighed less than 1,500 grams. The low birth weight rate for nonwhites is more than twice that for whites — 11.4 per 100 live births for nonwhites vs 5.6 for whites *(DOH, Bureau of Biostatistics, 1986)*.

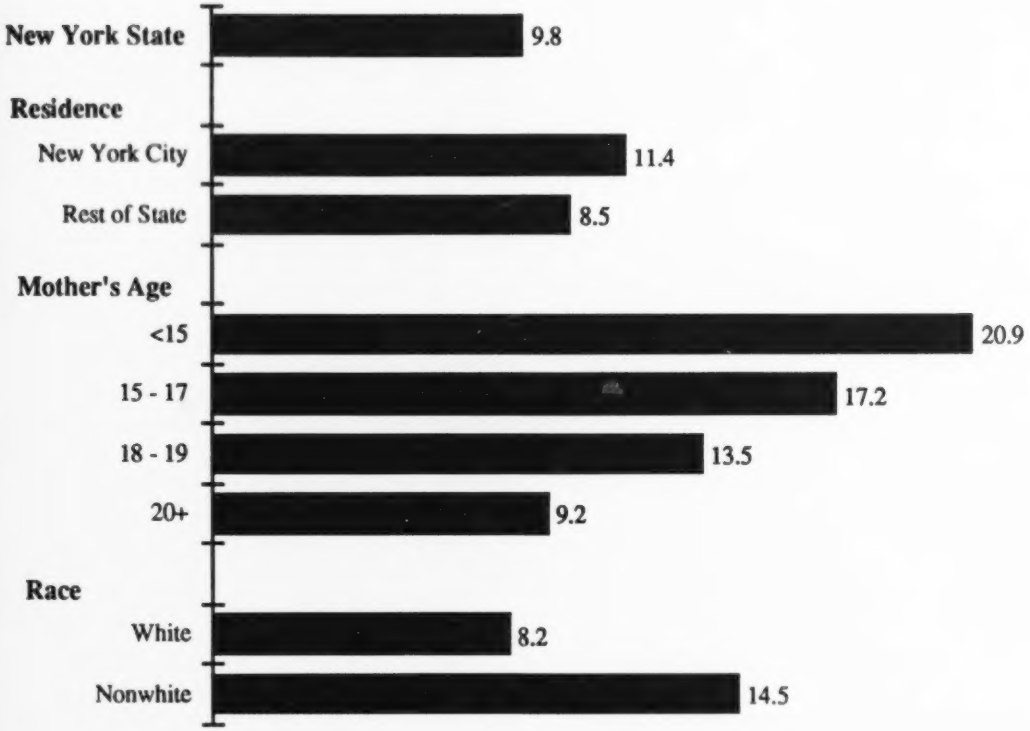
- ■ Mothers under 20 years of age are at higher risk of having low birth weight infants (9.7 per 100 live births) than are those aged 20 or older (6.7 per 100) (*DOH, Bureau of Biostatistics, 1986*).

**In New York State, low birth weight is less than 2,500 grams, whereas the Public Health Service definition is 2,500 grams and under.*

Figure 15

Premature Births (Gestation <37 Weeks) by Residence, Mother's Age, and Race New York State, 1985

(Rates per 100 Live Births)



Source: New York State Department of Health, Bureau of Biostatistics, 1986.

Table 24

PREMATURE BIRTHS (GESTATION < 37 WEEKS)
NUMBER AND RATE PER 100 LIVE BIRTHS[1] BY RACE
1985

	Total[2]		White		Nonwhite	
County	Number	Rate	Number	Rate	Number	Rate[3]
New York State	24,871	9.8	15,266	8.2	9,402	14.5
New York City	12,941	11.4	5,782	9.2	7,005	14.3
Bronx	2,696	12.4	1,297	10.7	1,375	14.5
Kings	5,012	12.1	1,862	9.2	3,100	15.1
New York	2,360	12.3	1,131	10.2	1,173	15.4
Queens	2,526	9.7	1,234	8.1	1,269	11.9
Richmond	347	7.0	258	6.2	88	10.8
Rest of State	11,930	8.5	9,484	7.8	2,397	15.2
Albany	292	8.4	213	7.4	68	16.0
Allegany	60	9.1	59	9.0	1	16.7
Broome	231	8.1	220	8.1	10	8.4
Cattaraugus	112	8.2	102	7.8	10	13.9
Cayuga	98	8.7	89	8.2	9	18.0
Chautauqua	160	7.8	154	7.7	6	9.7
Chemung	98	7.6	88	7.3	10	12.3
Chenango	43	6.3	42	6.2	0	0.0
Clinton	139	10.0	130	9.9	9	12.7
Columbia	52	7.0	44	6.4	6	13.3
Cortland	51	8.0	51	8.1	0	0.0
Delaware	56	9.5	56	9.6	0	0.0
Dutchess	256	8.6	201	7.7	52	14.0
Erie	1,292	9.7	915	8.3	376	16.3
Essex	54	10.8	52	10.5	2	28.6
Franklin	80	12.9	70	12.2	10	23.3
Fulton	82	11.9	80	11.9	2	16.7
Genesee	78	8.5	71	8.1	7	17.5
Greene	41	7.9	38	7.7	3	15.0
Hamilton	3	5.8	3	5.8	0	**.*
Herkimer	78	8.8	77	8.7	1	16.7
Jefferson	132	9.6	127	9.5	5	12.8
Lewis	29	7.4	29	7.4	0	**.*
Livingston	54	6.9	53	6.9	1	16.7
Madison	84	9.2	83	9.2	1	10.0
Monroe	852	8.2	563	6.7	285	14.1
Montgomery	56	8.6	54	8.5	2	18.2
Nassau	1,193	8.0	824	6.4	369	17.0
Niagara	285	9.2	229	8.2	56	17.6
Oneida	329	9.2	269	8.1	59	22.3
Onondaga	643	8.8	499	8.0	143	13.6
Ontario	92	7.3	88	7.2	4	10.3
Orange	360	8.4	277	7.4	82	15.2
Orleans	48	8.0	43	7.7	5	12.2
Oswego	151	8.5	148	8.4	3	15.0
Otsego	54	7.5	54	7.7	0	0.0
Putnam	64	5.7	62	5.8	2	6.7
Rensselaer	181	8.7	159	8.2	19	17.1
Rockland	316	8.6	230	7.7	85	13.1
St. Lawrence	118	8.0	117	8.1	1	3.4
Saratoga	161	7.0	154	6.9	6	13.0
Schenectady	148	7.3	128	6.9	20	13.2
Schoharie	33	9.1	32	9.0	1	25.0
Schuyler	15	7.3	14	6.9	1	50.0
Seneca	50	10.2	48	10.1	2	13.3
Steuben	118	8.3	111	8.0	7	21.9
Suffolk	1,338	8.1	1,070	7.2	263	16.1
Sullivan	90	9.5	75	8.6	15	18.3
Tioga	56	7.3	55	7.3	0	0.0
Tompkins	84	7.7	77	7.7	7	7.7
Ulster	183	8.8	162	8.3	19	15.2
Warren	65	8.6	65	8.8	0	0.0
Washington	72	9.6	70	9.4	2	33.3
Wayne	117	8.3	105	7.9	12	14.1
Westchester	954	9.1	606	7.5	338	14.6
Wyoming	29	5.0	29	5.1	0	0.0
Yates	20	7.1	20	7.2	0	0.0

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[1] The rate is based on the total number of live births minus the number of births for which the length of gestation is not reported.

[2] Total includes births for which the race and maternal age are not reported.

[3] "**.*" indicates that a rate could not be calculated because there were no births to mothers in this racial group. "0.0" means that there were births, but that none were premature.

Source: New York State Department of Health, Bureau of Biostatistics, 1986.

Table 25

PREMATURE BIRTHS (GESTATION < 37 WEEKS)
NUMBER AND RATE PER 100 LIVE BIRTHS[1] BY MATERNAL AGE
1985

	Maternal Age							
	10 - 14		15 - 17		18 - 19		20+	
County	Number	Rate[2]	Number	Rate	Number	Rate	Number	Rate
New York State	98	20.9	1,500	17.2	2,167	13.5	21,101	9.2
New York City	57	20.1	849	17.8	1,146	14.2	10,888	10.9
Bronx	22	23.4	225	17.6	278	13.2	2,171	11.9
Kings	20	18.7	364	18.6	484	15.3	4,144	11.5
New York	10	19.6	120	16.6	200	15.7	2,030	11.9
Queens	5	17.2	126	17.9	170	12.6	2,224	9.3
Richmond	0	0.0	14	13.7	14	7.5	319	6.8
Rest of State	41	22.2	651	16.4	1,021	12.8	10,213	8.0
Albany	2	40.0	17	15.3	30	13.1	243	7.8
Allegany	0	**.*	2	8.3	5	9.8	53	9.0
Broome	1	50.0	13	16.7	16	9.2	201	7.8
Cattaraugus	0	0.0	13	21.0	14	9.9	85	7.3
Cayuga	1	50.0	8	19.0	14	13.5	75	7.6
Chautauqua	2	50.0	11	17.7	20	14.3	127	6.9
Chemung	1	25.0	4	6.1	4	4.3	89	7.9
Chenango	0	**.*	4	13.8	5	9.1	34	5.7
Clinton	0	**.*	2	5.0	16	13.9	121	9.8
Columbia	0	**.*	1	3.2	5	8.8	46	7.0
Cortland	0	**.*	1	4.3	10	18.5	40	7.1
Delaware	0	**.*	6	21.4	10	21.3	40	7.8
Dutchess	1	33.3	6	13.0	18	14.5	231	8.2
Erie	5	14.7	82	16.2	99	11.9	1,105	9.2
Essex	0	**.*	8	30.8	6	14.0	40	9.3
Franklin	1	**.*	6	20.7	12	15.2	61	12.0
Fulton	0	**.*	6	15.8	14	19.2	62	10.7
Genesee	1	**.*	4	13.8	5	7.4	68	8.3
Greene	0	0.0	2	9.5	3	8.8	36	7.8
Hamilton	0	**.*	0	0.0	0	0.0	3	6.3
Herkimer	0	0.0	6	20.0	9	14.1	63	7.9
Jefferson	0	**.*	10	14.7	10	8.4	112	9.4
Lewis	0	**.*	1	7.7	3	8.1	25	7.3
Livingston	1	**.*	1	5.6	10	21.7	42	5.9
Madison	1	**.*	3	9.7	9	14.8	71	8.6
Monroe	5	23.8	62	18.1	84	14.0	700	7.4
Montgomery	0	**.*	3	13.6	7	17.5	46	7.8
Nassau	2	22.2	51	22.4	80	18.1	1,060	7.4
Niagara	1	20.0	23	20.4	31	14.1	230	8.3
Oneida	3	50.0	23	18.9	34	11.6	269	8.5
Onondaga	2	16.7	44	15.9	56	12.0	541	8.3
Ontario	1	50.0	2	6.9	10	14.3	79	6.8
Orange	0	0.0	18	12.2	30	11.5	312	8.0
Orleans	1	50.0	3	12.0	8	14.5	36	6.9
Oswego	1	50.0	6	9.7	9	6.7	135	8.5
Otsego	0	**.*	0	0.0	8	18.6	46	6.9
Putnam	0	**.*	2	50.0	0	0.0	62	5.7
Rensselaer	2	66.7	9	14.3	20	13.5	149	8.0
Rockland	0	0.0	9	18.4	14	11.8	293	8.4
St. Lawrence	0	0.0	5	9.8	12	9.3	101	7.8
Saratoga	0	0.0	7	13.7	15	11.5	139	6.6
Schenectady	0	0.0	9	17.3	16	14.8	123	6.6
Schoharie	0	**.*	1	12.5	4	15.4	28	8.6
Schuyler	0	**.*	1	9.1	2	12.5	12	6.7
Seneca	0	**.*	2	16.7	4	9.5	44	10.0
Steuben	0	0.0	10	14.9	13	8.8	95	7.9
Suffolk	1	5.9	60	20.8	85	13.0	1,191	7.7
Sullivan	0	**.*	5	12.8	7	11.3	78	9.2
Tioga	0	**.*	5	17.9	6	10.7	45	6.6
Tompkins	0	**.*	5	16.1	5	11.6	74	7.3
Ulster	0	0.0	3	5.8	19	16.8	161	8.4
Warren	0	**.*	5	17.9	10	18.5	50	7.5
Washington	0	0.0	7	21.9	13	14.0	52	8.3
Wayne	0	0.0	7	16.3	13	13.1	97	7.7
Westchester	5	33.3	47	22.2	58	14.9	844	8.6
Wyoming	0	**.*	0	0.0	1	2.3	28	5.5
Yates	0	**.*	0	0.0	0	0.0	20	7.7

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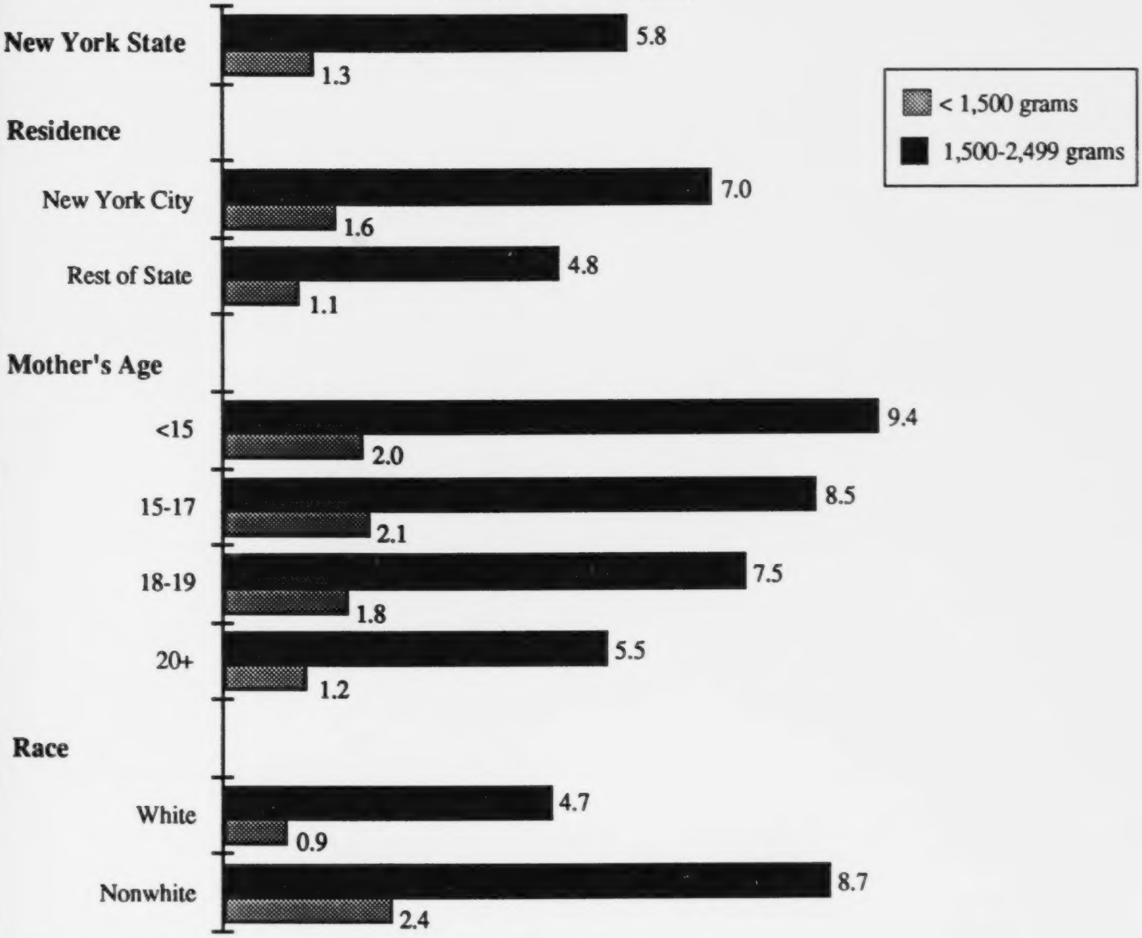
[1] The rate is based on the total number of live births minus the number of births for which the gestation is not stated.

[2] "**.*" indicates that a rate could not be calculated because there were no births to mothers in this age group. "0.0" means that there were births, but that none were premature.

Source: New York State Department of Health, Bureau of Biostatistics, 1986.

Figure 16

Low Birth Weight Births
by Residence, Mother's Age, and Race
New York State, 1985
(Rates per 100 Live Births)



Source: New York State Department of Health, Bureau of Biostatistics, 1986.

Table 26

LOW BIRTH WEIGHT BIRTHS (<2,500 GRAMS)
NUMBER AND RATE PER 100 LIVE BIRTHS[1] BY RACE
1985

County	Total[2]			White			Nonwhite		
	<1500G	1500-2499G	Rate <2500G	<1500G	1500-2499G	Rate <2500G	<1500G	1500-2499G	Rate <2500G[3]
New York State	3,352	14,736	7.0	1,723	8,872	5.6	1,587	5,717	11.1
New York City	1,803	7,886	8.5	633	3,428	6.4	1,154	4,378	11.2
Bronx	390	1,750	9.8	152	844	8.2	236	892	11.9
Kings	731	2,949	8.8	211	1,078	6.3	515	1,840	11.3
New York	269	1,385	8.6	98	614	6.4	191	745	12.2
Queens	337	1,545	7.2	138	705	5.5	197	831	9.6
Richmond	49	257	6.1	34	187	5.3	15	70	10.4
Rest of State	1,549	6,850	5.8	1,090	5,444	5.1	433	1,339	10.9
Albany	44	183	5.9	31	126	5.1	13	43	12.2
Allegany	8	21	4.3	8	21	4.4	0	0	0.0
Broome	31	135	5.6	29	127	5.6	2	8	7.8
Cattaraugus	10	58	4.9	9	56	4.9	1	2	4.2
Cayuga	12	49	5.3	12	42	4.9	0	7	13.7
Chautauqua	19	75	4.5	19	71	4.5	0	4	6.5
Chemung	7	70	5.9	6	66	5.9	1	4	6.2
Chenango	4	24	4.0	4	24	4.0	0	0	0.0
Clinton	13	69	5.8	12	64	5.7	1	5	8.5
Columbia	3	28	3.9	3	25	3.9	0	3	6.4
Cortland	5	30	5.3	5	30	5.4	0	0	0.0
Delaware	6	41	7.8	6	41	7.9	0	0	0.0
Dutchess	28	154	5.6	22	121	5.0	6	33	9.6
Erie	199	729	6.8	124	508	5.7	75	220	12.4
Essex	4	30	6.6	4	29	6.5	0	1	14.3
Franklin	4	45	7.6	4	42	7.7	0	3	7.0
Fulton	7	35	6.0	7	35	6.2	0	0	0.0
Genesee	7	48	5.9	4	46	5.6	3	2	12.2
Greene	6	20	4.8	6	19	4.9	0	1	5.0
Hamilton	0	4	7.3	0	4	7.3	0	0	**.*
Herkimer	11	39	5.6	11	38	5.5	0	1	16.7
Jefferson	21	74	6.8	20	71	6.7	1	3	10.3
Lewis	2	21	5.7	2	21	5.7	0	0	**.*
Livingston	7	39	5.8	7	38	5.7	0	1	14.3
Madison	13	47	6.4	13	47	6.5	0	0	0.0
Monroe	107	542	5.9	59	363	4.8	45	176	10.1
Montgomery	7	31	5.8	7	31	5.9	0	0	0.0
Nassau	169	709	5.8	98	524	4.8	70	182	11.3
Niagara	40	149	6.0	29	117	5.1	11	32	13.0
Oneida	40	190	6.3	31	160	5.6	9	30	14.6
Onondaga	90	366	6.2	55	283	5.4	35	83	10.9
Ontario	10	58	5.2	10	55	5.2	0	3	7.1
Orange	44	211	5.8	25	161	4.9	19	50	12.6
Orleans	4	30	5.5	4	25	5.1	0	5	11.6
Oswego	12	88	5.6	12	87	5.6	0	1	5.0
Otsego	7	29	4.9	7	28	4.9	0	1	5.6
Putnam	5	31	3.1	5	29	3.1	0	2	6.7
Rensselaer	27	107	6.1	22	90	5.6	5	11	13.7
Rockland	42	173	5.8	25	137	5.3	17	36	8.0
St.Lawrence	15	77	6.1	15	74	6.0	0	3	10.3
Saratoga	18	93	4.7	18	88	4.7	0	5	10.6
Schenectady	29	77	5.1	26	67	4.9	2	10	7.7
Schoharie	5	23	7.6	5	22	7.5	0	0	0.0
Schuyler	2	11	6.3	2	11	6.3	0	0	0.0
Seneca	3	34	7.3	2	33	7.2	1	1	12.5
Steuben	11	76	6.0	10	71	5.7	1	5	18.2
Suffolk	177	798	5.6	119	608	4.7	37	160	11.4
Sullivan	7	54	6.3	4	48	5.9	3	6	10.3
Tioga	10	33	5.4	10	32	5.4	0	0	0.0
Tompkins	9	36	4.0	8	29	3.6	1	7	8.5
Ulster	18	103	5.7	15	92	5.4	3	10	9.9
Warren	5	32	4.8	5	31	4.7	0	1	9.1
Washington	8	29	4.8	8	28	4.7	0	1	16.7
Wayne	19	62	5.6	11	57	5.0	8	5	15.1
Westchester	134	506	6.0	71	327	4.8	63	172	10.0
Wyoming	3	14	2.9	3	14	2.9	0	0	0.0
Yates	1	10	3.8	1	10	3.8	0	0	0.0

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[1] The rate is based on the total number of live births minus the number of births for which the birth weight is not reported.

[2] Total includes births for which the race and maternal age are not reported.

[3] "**.*" indicates that a rate could not be calculated because there were no births to mothers in this racial group.

Source: New York State Department of Health, Bureau of Biostatistics, 1986.

Table 27

LOW BIRTH WEIGHT BIRTHS (<2,500 GRAMS) NUMBER AND RATE PER 100 LIVE BIRTHS[1] BY MATERNAL AGE

1985

	10 - 14 Yrs		15 - 17 Yrs		18 - 19 Yrs		20+ Yrs	
County	Number	Rate[2]	Number	Rate	Number	Rate	Number	Rate
New York State	57	11.4	947	10.5	1,521	9.3	15,560	6.7
New York City	28	9.7	586	12.2	878	10.8	8,310	8.3
Bronx	11	11.7	170	13.3	221	10.4	1,738	9.5
Kings	11	10.0	251	12.7	365	11.4	3,052	8.4
New York	3	5.8	73	10.1	137	10.8	1,468	8.6
Queens	2	6.5	75	10.7	140	10.3	1,665	6.9
Richmond	1	33.3	12	11.9	8	4.3	285	6.1
Rest of State	29	13.7	361	8.6	643	7.7	7,250	5.5
Albany	2	22.2	20	14.9	20	8.0	185	5.4
Allegany	0	**.*	2	8.3	4	7.8	23	3.9
Broome	1	50.0	11	13.1	9	4.9	145	5.4
Cattaraugus	0	0.0	6	9.5	8	5.6	54	4.6
Cayuga	1	33.3	4	9.3	14	13.1	42	4.2
Chautauqua	1	25.0	3	4.8	10	7.1	80	4.3
Chemung	0	0.0	0	0.0	5	5.3	72	6.3
Chenango	0	**.*	2	6.7	2	3.5	24	3.9
Clinton	0	**.*	1	2.4	9	7.6	72	5.8
Columbia	0	**.*	0	0.0	3	5.0	28	4.0
Cortland	0	**.*	2	8.7	8	14.3	25	4.3
Delaware	0	**.*	7	24.1	6	12.5	34	6.5
Dutchess	1	25.0	2	3.7	7	4.9	172	5.6
Erie	5	14.3	49	9.3	74	8.7	799	6.6
Essex	0	**.*	4	13.8	2	4.5	28	6.3
Franklin	0	0.0	3	9.7	9	11.0	37	7.0
Fulton	0	**.*	4	10.5	8	10.8	30	5.1
Genesee	0	0.0	2	6.9	1	1.4	52	6.2
Greene	1	**.*	2	8.7	2	6.1	21	4.4
Hamilton	0	**.*	0	0.0	0	0.0	4	7.8
Herkimer	0	0.0	3	10.0	5	7.7	42	5.3
Jefferson	0	0.0	4	5.8	6	4.8	85	7.1
Lewis	0	**.*	0	0.0	3	7.5	20	5.7
Livingston	1	**.*	0	0.0	6	12.8	39	5.3
Madison	0	0.0	2	5.9	5	8.2	53	6.3
Monroe	4	13.3	23	6.2	44	7.0	578	5.8
Montgomery	0	**.*	3	13.0	3	7.5	32	5.4
Nassau	3	27.3	25	10.5	53	11.5	797	5.5
Niagara	0	0.0	18	15.5	17	7.6	154	5.5
Oneida	3	50.0	11	8.4	25	8.5	191	5.9
Onondaga	1	7.7	31	11.0	40	8.4	384	5.8
Ontario	1	50.0	0	0.0	8	11.3	59	4.9
Orange	0	0.0	14	9.3	22	8.1	219	5.5
Orleans	1	50.0	1	3.7	3	5.5	29	5.5
Oswego	0	0.0	3	4.8	7	5.2	90	5.6
Otsego	0	**.*	0	0.0	4	9.3	32	4.7
Putnam	0	**.*	0	0.0	1	5.6	35	3.1
Rensselaer	1	33.3	11	16.4	10	6.5	111	5.7
Rockland	0	0.0	5	9.6	9	7.5	201	5.7
St Lawrence	0	0.0	4	8.0	6	4.6	82	6.2
Saratoga	0	0.0	5	9.6	10	7.4	96	4.4
Schenectady	0	0.0	8	15.1	7	6.3	91	4.8
Schoharie	0	**.*	2	25.0	2	7.7	24	7.2
Schuyler	0	**.*	1	9.1	0	0.0	12	6.6
Seneca	0	**.*	0	0.0	4	9.3	33	7.3
Steuben	0	0.0	4	6.0	13	8.6	70	5.7
Suffolk	1	5.3	25	7.7	55	7.3	894	5.4
Sullivan	0	0.0	2	5.1	6	9.5	53	6.1
Tioga	0	**.*	2	6.7	2	3.3	39	5.5
Tompkins	0	**.*	1	2.8	2	4.7	42	4.1
Ulster	0	0.0	3	5.6	11	9.1	107	5.5
Warren	0	0.0	3	10.0	6	11.1	28	4.1
Washington	0	0.0	0	0.0	9	9.3	28	4.3
Wayne	0	0.0	5	10.9	12	11.7	64	5.0
Westchester	1	6.3	23	10.6	32	8.1	584	5.8
Wyoming	0	**.*	0	0.0	0	0.0	17	3.3
Yates	0	**.*	0	0.0	1	6.3	10	3.7

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[1] The rate is based on the total number of live births minus the number of births for which the birth weight is not reported.

[2] "**.*" indicates that a rate could not be calculated because there were no births to mothers in this age group. "0.0" means that there were births, but that none of the infants weighed <2,500 grams at birth.

Source: New York State Department of Health, Bureau of Biostatistics, 1986.

CONGENITAL MALFORMATIONS

Congenital malformations encompass any structural, functional, or biochemical abnormality determined genetically or induced during gestation and not due to birthing events. Congenital malformations are the leading cause of infant mortality in developed countries *(Oakley, 1985)*. Some malformations require extensive medical or surgical interventions. Others present lifelong disabling conditions requiring rehabilitative or custodial care. Such defects occur in 6.7 percent of all live births in New York State, presenting a public health problem for which preventive measures and early intervention programs are needed.

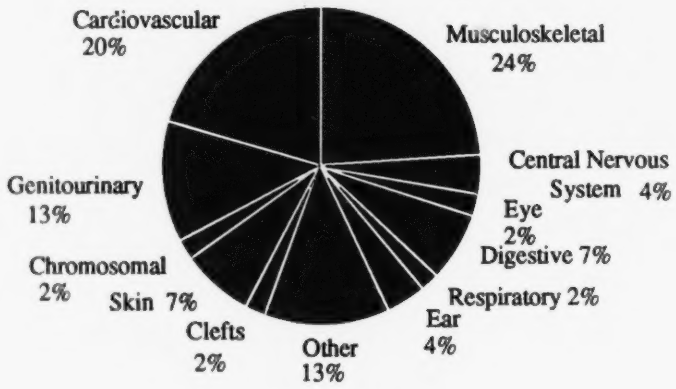
In New York State, the Congenital Malformations Registry, maintained by the New York State Department of Health, Bureau of Environmental Epidemiology and Occupational Health, collects clinical and demographic data on every child with a congenital malformation that is diagnosed by the time the child is 2 years old. Children born in 1983 constitute the first complete registry cohort (1983-1985).

- Among all children born in New York in 1983, a total of 16,532 had at least one congenital malformation. Approximately 20 percent of these children had more than one malformation. Children with more than one malformation averaged 2.8 malformations per child *(DOH, Bureau of Environmental Epidemiology and Occupational Health, 1987)*.

Figure 17

Congenital Malformations Reported Among Children Born in 1983 New York State

(Total Reported Malformations = 22,394)



Source: New York State Department of Health, Bureau of Environmental Epidemiology and Occupational Health, 1987.

ADOLESCENT PREGNANCY

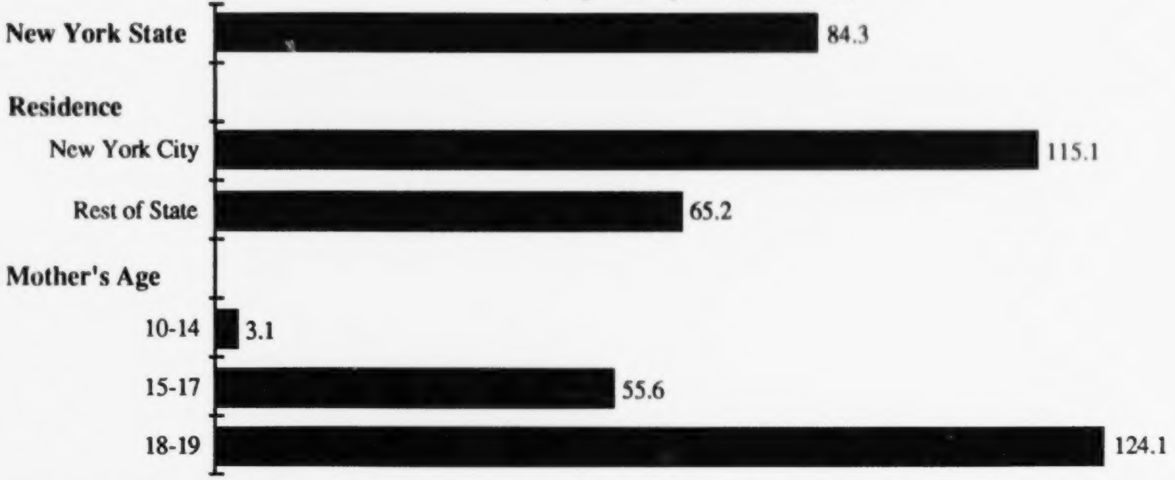
Adolescent parents (aged 10-19) often face significant difficulties — extended school absence or even termination of schooling *(Zellman, 1982)*, financial hardship, isolation from peers, and psychological stress *(Ulvedal & Feeg, 1983)*. By disrupting education and depriving a young woman of paid work experience, early childbearing may result in prolonged periods of unemployability later in life or lifelong underemployment *(Mott & Maxwell, 1981)*. For these reasons, adolescents with a history of two or more births represent a population at special risk.

Infants born to adolescent mothers have a higher rate of low birth weight (less than 2,500 grams) than those born to mature women *(Institute of Medicine, 1985)*. In addition, teens have higher rates of pregnancy-related problems such as hypertension, forceps delivery, and operative delivery than older mothers *(Graham, 1981)*.

Pregnancy rate is the number of live births, reported induced terminations of pregnancies, and reported fetal deaths of all gestations (excluding induced terminations) per 1,000 females. Because New York State data do not include unreported spontaneous abortions (miscarriages), the published pregnancy rate is slightly lower than the actual pregnancy rate.

Figure 18

Adolescent Pregnancy Rates
New York State, 1985
(Pregnancies per 1,000 Females)



Note: Unless otherwise specified, rate is for females 15-19 years old.

Source: New York State Department of Health, Bureau of Biostatistics, 1986.

125

128

- In 1985, the rate of reported pregnancies for adolescents aged 15-19 in New York State was 84.3 per 1,000; the rate in New York City was 115.1 per 1,000 *(Table 28).*

- In 1985 in New York State, the rate of low birth weight infants born to women under age 20 was 44.8 percent higher than that for women aged 20 and above (9.7% vs. 6.7%) *(DOH, Bureau of Biostatistics, 1986).*

- Adolescent mothers in New York State were more than twice as likely as women aged 20 and above in 1985 to receive late or no prenatal care (21.5% vs. 9.5%) *(DOH, Bureau of Biostatistics, 1986).*

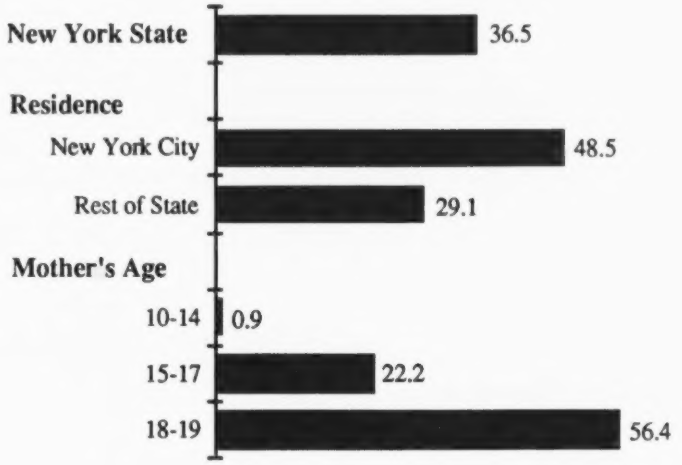
- In 1985, the rate of low birth weight births among nonwhite adolescent mothers (12.5%) in New York State was more than one and one-half times that among white teenage mothers (7.9%) *(DOH, Bureau of Biostatistics, 1986).*

- Over one in ten (11%) births to adolescents 17 years of age and younger in New York State in 1985 were to females who had given birth previously. Among births to females 18-19 years, 24 percent were to mothers who had already given birth *(Table 31).*

Figure 19

Adolescent Live Birth Rates
New York State, 1985

(Live Births per 1,000 Females)



Note: Unless otherwise specified, rate is for females 15-19 years old.

Source: New York State Department of Health, Bureau of Biostatistics, 1986.

127

128

Table 28

REPORTED ADOLESCENT PREGNANCIES BY MATERNAL AGE 1985

County	Total Adolescent Pregnancies[1]	Maternal Age			Rate per 1,000 Females Aged 15-19
		10-14	15-17	18-19	
New York State	60,557	1,745	22,572	36,240	84.3
New York City	31,806	1,099	12,271	18,436	115.1
Bronx	7,970	303	3,142	4,525	151.7
Kings	12,440	458	4,857	7,125	136.7
New York	5,039	180	1,932	2,927	106.2
Queens	5,476	135	1,992	3,349	79.1
Richmond	881	23	348	510	56.4
Rest of State	28,751	646	10,301	17,804	65.2
Albany	756	15	289	452	58.8
Allegany	148	1	51	96	48.1
Broome	615	13	215	387	63.9
Cattaraugus	317	5	103	209	82.7
Cayuga	219	7	71	141	67.2
Chautauqua	446	11	158	277	74.3
Chemung	274	8	110	156	69.4
Chenango	147	3	59	85	75.1
Clinton	182	1	48	133	46.7
Columbia	153	2	62	89	73.9
Cortland	157	2	51	104	55.8
Delaware	116	0	45	71	59.9
Dutchess	468	12	163	293	41.9
Erie	3,453	116	1,279	2,058	82.5
Essex	85	0	35	50	63.9
Franklin	139	4	42	93	77.5
Fulton	220	1	93	126	102.7
Genesee	162	1	53	108	69.0
Greene	106	4	41	61	73.3
Hamilton	13	1	9	3	71.4
Herkimer	191	3	73	115	77.2
Jefferson	227	4	79	144	65.2
Lewis	69	0	24	45	72.9
Livingston	129	2	45	82	37.4
Madison	194	3	70	121	44.8
Monroe	2,022	69	773	1,180	64.0
Montgomery	134	1	57	76	71.0
Nassau	2,874	48	993	1,833	61.1
Niagara	690	17	245	428	80.2
Oneida	744	16	225	503	73.5
Onondaga	1,391	36	504	851	64.0
Ontario	204	6	73	125	52.9
Orange	705	17	264	424	62.8
Orleans	134	3	49	82	83.9
Oswego	335	8	130	197	56.7
Otsego	101	0	32	69	28.7
Putnam	94	0	24	70	31.4
Rensselaer	396	7	138	251	61.8
Rockland	606	10	240	356	57.5
St. Lawrence	276	7	75	194	45.0
Saratoga	358	9	129	220	49.2
Schenectady	431	9	162	260	77.9
Schoharie	88	1	21	66	44.5
Schuyler	43	1	21	21	69.8
Seneca	79	0	23	56	68.2
Steuben	294	7	95	192	80.9
Suffolk	4,179	74	1,415	2,690	75.7
Sullivan	190	7	77	106	86.1
Tioga	146	1	54	91	76.0
Tompkins	247	2	91	154	40.8
Ulster	376	9	131	236	59.5
Warren	119	1	42	76	52.4
Washington	152	1	45	106	69.0
Wayne	250	7	85	158	72.3
Westchester	1,951	49	766	1,136	58.5
Wyoming	114	1	42	71	79.0
Yates	42	3	12	27	44.2

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[1] The total pregnancies are the sum of live births, induced abortions, and spontaneous fetal deaths (all gestations).

Source: New York State Department of Health, Bureau of Biostatistics, 1987.

Table 29

LIVE BIRTHS AMONG ADOLESCENTS BY MATERNAL AGE 1985

County	Total Adolescent Live Births	Maternal Age 10-14	Maternal Age 15-17	Maternal Age 18-19	Rate per 1,000 Females Aged 15-19
New York State	25,973	503	9,008	16,462	36.5
New York City	13,222	290	4,800	8,132	48.5
Bronx	3,494	94	1,285	2,115	67.3
Kings	5,293	110	1,979	3,204	59.1
New York	2,050	52	726	1,272	43.7
Queens	2,093	31	708	1,354	30.5
Richmond	292	3	102	187	19.0
Rest of State	12,751	213	4,208	8,330	29.1
Albany	394	9	135	250	30.6
Allegany	75	0	24	51	24.5
Broome	269	2	84	183	28.3
Cattaraugus	211	1	63	147	55.7
Cayuga	153	3	43	107	47.5
Chautauqua	208	4	63	141	34.8
Chemung	167	4	69	94	42.5
Chenango	87	0	30	57	45.4
Clinton	160	0	41	119	41.3
Columbia	96	0	36	60	47.0
Cortland	79	0	23	56	28.4
Delaware	77	0	29	48	39.8
Dutchess	200	4	54	142	18.0
Erie	1,419	36	527	856	34.2
Essex	73	0	29	44	54.8
Franklin	114	1	31	82	64.8
Fulton	113	0	38	75	53.0
Genesee	100	1	29	70	42.4
Greene	58	1	23	34	41.0
Hamilton	4	0	3	1	23.8
Herkimer	96	1	30	65	39.0
Jefferson	196	3	69	124	56.4
Lewis	53	0	13	40	56.0
Livingston	67	1	19	47	19.4
Madison	96	1	34	61	22.3
Monroe	1,051	31	377	643	33.4
Montgomery	63	0	23	40	33.6
Nassau	711	11	238	462	15.1
Niagara	347	6	116	225	40.7
Oneida	432	6	131	295	43.0
Onondaga	769	13	281	475	35.7
Ontario	102	2	29	71	26.7
Orange	432	7	152	273	38.8
Orleans	85	2	27	56	53.1
Oswego	199	2	63	134	34.1
Otsego	55	0	12	43	15.6
Putnam	23	0	4	19	7.7
Rensselaer	224	3	67	154	35.1
Rockland	173	1	52	120	16.6
St. Lawrence	186	4	51	131	30.5
Saratoga	191	3	53	135	26.5
Schenectady	167	3	53	111	30.3
Schoharie	35	0	8	27	17.9
Schuyler	27	0	11	16	44.9
Seneca	55	0	12	43	47.5
Steuben	222	4	67	151	61.4
Suffolk	1,100	19	328	753	19.9
Sullivan	103	1	39	63	48.0
Tioga	90	0	30	60	47.2
Tompkins	79	0	36	43	13.1
Ulster	178	2	54	122	28.6
Warren	85	1	30	54	37.3
Washington	130	1	32	97	59.0
Wayne	152	3	46	103	44.3
Westchester	634	16	220	398	19.0
Wyoming	63	0	20	43	44.0
Yates	23	0	7	16	26.1

Source: New York State Department of Health, Bureau of Biostatistics, 1987.

Table 30

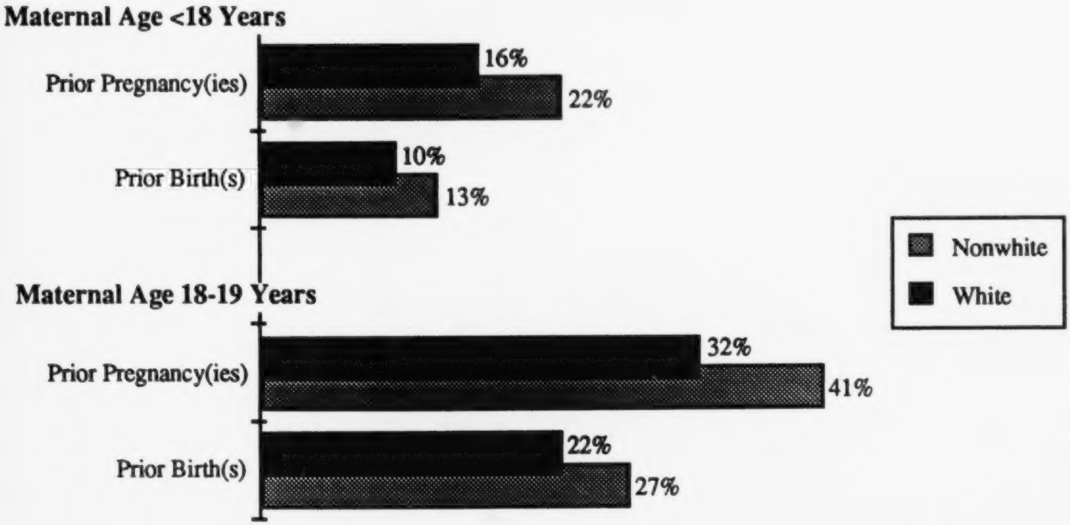
INDUCED ABORTIONS AMONG ADOLESCENTS BY MATERNAL AGE 1985

County	Total Induced Abortions	Maternal Age			Rate per 1,000 Females Aged 15-19
		10-14	15-17	18-19	
New York State	33,355	1,215	13,121	19,019	46.0
New York City	18,126	800	7,304	10,022	65.0
Bronx	4,405	207	1,826	2,372	83.0
Kings	6,942	343	2,807	3,792	75.3
New York	2,913	127	1,180	1,606	60.9
Queens	3,304	104	1,258	1,942	47.4
Richmond	562	19	233	310	35.7
Rest of State	15,229	415	5,817	8,997	34.3
Albany	334	6	141	187	26.0
Allegany	65	1	23	41	20.9
Broome	322	10	121	191	33.1
Cattaraugus	92	4	38	50	23.3
Cayuga	63	4	27	32	18.7
Chautauqua	225	7	91	127	37.2
Chemung	92	4	36	52	22.9
Chenango	52	3	26	23	25.5
Clinton	17	1	5	11	4.1
Columbia	53	2	24	27	25.0
Cortland	73	1	28	44	25.9
Delaware	36	0	15	21	18.6
Dutchess	243	7	100	136	21.7
Erie	1,960	78	727	1,155	46.5
Essex	12	0	6	6	9.0
Franklin	23	3	10	10	11.5
Fulton	96	0	50	46	45.0
Genesee	61	0	24	37	26.1
Greene	45	3	17	25	30.2
Hamilton	6	1	4	1	29.8
Herkimer	90	2	41	47	36.2
Jefferson	16	0	7	9	4.7
Lewis	14	0	10	4	14.8
Livingston	54	0	23	31	15.9
Madison	95	2	35	58	21.8
Monroe	913	34	372	507	28.8
Montgomery	67	1	32	34	35.2
Nassau	2,097	37	732	1,328	44.5
Niagara	319	10	119	190	36.8
Oneida	292	10	90	192	28.5
Onondaga	598	22	212	364	27.2
Ontario	98	4	41	53	25.1
Orange	251	10	107	134	22.0
Orleans	44	1	20	23	27.5
Oswego	132	6	66	60	21.8
Otsego	40	0	17	23	11.4
Putnam	71	0	20	51	23.7
Rensselaer	154	4	66	84	23.8
Rockland	419	8	185	226	39.7
St. Lawrence	84	3	22	59	13.6
Saratoga	157	6	71	80	21.3
Schenectady	234	6	96	132	42.1
Schoharie	52	1	13	38	26.1
Schuyler	14	1	8	5	21.6
Seneca	21	0	10	11	18.1
Steuben	68	3	27	38	18.3
Suffolk	2,995	53	1,057	1,885	54.2
Sullivan	80	6	35	39	34.8
Tioga	55	1	24	30	28.3
Tompkins	155	2	49	104	25.5
Ulster	186	7	73	106	29.0
Warren	33	0	12	21	14.7
Washington	22	0	13	9	10.1
Wayne	85	4	37	44	24.1
Westchester	1,287	32	536	719	38.6
Wyoming	49	1	21	27	33.5
Yates	18	3	5	10	17.0

Source: New York State Department of Health, Bureau of Biostatistics, nd.

Figure 20

**Percentage of Births to Adolescent Mothers
Who Had Previously Been Pregnant or Given Birth
New York State, 1985**



Source: New York State Department of Health, Bureau of Biostatistics, 1986.

Table 31

PERCENTAGE OF BIRTHS TO ADOLESCENTS WHO HAD PREVIOUSLY BEEN PREGNANT OR GIVEN BIRTH
1985

	Maternal Age < 18		Maternal Age 18-19	
County	Prior Pregnancy	Prior Birth	Prior Pregnancy	Prior Birth
New York State	19%	11%	35%	24%
New York City	20	12	35	25
Bronx	19	14	34	27
Kings	21	14	38	26
New York	20	8	38	32
Queens	17	9	28	20
Richmond	14	10	25	22
Rest of State	18	10	35	23
Albany	17	7	30	18
Allegany	21	13	37	27
Broome	21	13	38	23
Cattaraugus	17	9	33	20
Cayuga	9	7	28	23
Chautauqua	16	9	35	26
Chemung	14	5	32	18
Chenango	27	17	35	23
Clinton	20	10	29	24
Columbia	31	19	23	17
Cortland	26	13	45	27
Delaware	14	14	38	29
Dutchess	10	7	37	20
Erie	19	9	39	24
Essex	7	3	27	20
Franklin	6	6	35	30
Fulton	21	11	41	33
Genesee	23	10	31	19
Greene	8	0	21	12
Hamilton	0	0	100	100
Herkimer	19	16	25	22
Jefferson	19	10	31	24
Lewis	8	0	28	25
Livingston	5	5	26	15
Madison	6	0	33	20
Monroe	20	12	37	24
Montgomery	39	13	48	28
Nassau	26	12	37	18
Niagara	23	8	33	20
Oneida	16	10	28	21
Onondaga	20	15	38	28
Ontario	23	10	21	13
Orange	19	9	36	23
Orleans	14	10	43	30
Oswego	8	2	31	25
Otsego	8	0	26	19
Putnam	0	0	47	21
Rensselaer	13	9	40	29
Rockland	32	11	37	18
St. Lawrence	4	0	34	26
Saratoga	11	5	33	24
Schenectady	13	5	40	27
Schoharie	25	0	41	26
Schuyler	9	9	31	25
Seneca	33	25	33	21
Steuben	11	8	40	32
Suffolk	20	10	32	19
Sullivan	25	10	30	17
Tioga	3	3	32	22
Tompkins	28	6	42	28
Ulster	18	7	36	20
Warren	13	13	33	30
Washington	6	6	34	22
Wayne	16	14	37	30
Westchester	21	12	41	24
Wyoming	25	15	21	21
Yates	0	0	38	25

Source: New York State Department of Health, Bureau of Biostatistics, 1986.

SUBSTANCE ABUSE

Teenage experimentation with alcohol and drugs is widespread in our society. Nationally, the proportion of high school seniors who drink has remained stable (approximately 70 percent) over the last decade, whereas the proportion of seniors using stimulants, cocaine, and inhalants has increased *(United States Congress, 1983)*. A survey of New York State's high school students found that approximately 60 percent had had some involvement with illicit or nonmedical use of drugs, and almost half of those surveyed reported use in the six months prior to the survey. Marijuana was used by 35 percent of the students, stimulants by 17 percent, and cocaine by 10 percent (*New York State Division of Substance Abuse Services [DSAS], 1984*). Since 1984, drug treatment centers and hospital emergency rooms have noted large increases in the use of "crack" (a free-based form of cocaine that is smoked and is highly addictive) *(DSAS, 1986)*. Good data on the prevalence of crack use in New York State are not yet available from statewide surveys.

Alcohol and drug use can lead to health problems and, sometimes, death. It is estimated that from 10 to 15 percent of the teenagers who use drugs or alcohol will develop serious problems. Drinking or drug abuse during pregnancy has been tied to increased risk of infants' physical problems, including fetal alcohol syndrome, brain damage, and mental retardation (*Davis, Kercheck, & Schricker, 1986; Parker, Shultz, Gertz, Berkelman, & Remington, 1987)*.

Alcohol plays a large role in accidental deaths. Its consumption is a factor in over half (55%) of the fatal car accidents among drivers younger than 21 years (*Colorado Department of Health, 1985*). Similarly, drownings, second to motor vehicle accidents as the leading cause of accidental deaths among teenagers, are often alcohol-related. Alcohol has also been found to be a factor in child abuse, family violence, and homicides (*Davis et al., 1986*).

Physical, psychological, social, and environmental risk factors are related to adolescent alcohol and drug abuse. Associated personality traits include rebelliousness, impulsiveness, and a proclivity for deviant behavior. Children of alcoholic parents have a 50 percent chance of becoming alcoholic and a 30 percent chance of marrying an alcohol abuser. Other factors thought to be related to alcohol and drug use include family dysfunction, peer pressure, and easy access to these substances (*Davis et al., 1986*).

- The proportion of white students (76%) who reported that they drank was larger than that of Hispanics (63%), blacks (60%), and others (55%). Similarly, the proportion of students who reported that they were heavy drinkers was higher for whites (16%) than for Hispanics (8%), blacks (5%), or other racial/ethnic groups (10%) *(Barnes, 1984)*.

- Between 1978 and 1983, self-reported marijuana and PCP use among New York State students declined; use of stimulants, cocaine, and inhalants increased; and use of heroin, hallucinogens (other than PCP), cough medicine, tranquilizers, and other drugs remained essentially unchanged (*DSAS, 1984*).

Table 32

CLASSIFICATION OF ALCOHOL CONSUMPTION AMONG SECONDARY SCHOOL STUDENTS NEW YORK STATE, 1983

Alcohol Consumption[1]	Percentage	Estimated Number
Total	100%	1,542,000
Abstainers	29	447,000
Infrequent	14	216,000
Light	16	247,000
Moderate	14	216,000
Moderate/Heavy	14	216,000
Heavy	13	200,000

[1] The following classification scheme was used to describe degree of alcohol use:

Abstainers - Don't drink or drink less than once a year.

Infrequent - Drink once a month at most and drink small amounts per typical drinking occasion (< .69 oz. absolute alcohol – no more than one drink).

Light - Drink once a month at most and consume medium amounts per typical drinking occasion (.69 to 2.70 oz. absolute alcohol – approximately 2 to 4 drinks), or drink more than 3 to 4 times a month and consume small amounts per typical drinking occasion.

Moderate - (1) Drink at least once a week and consume small amounts per typical drinking occasion; (2) drink 3 to 4 times a month and consume medium amounts per typical drinking occasion; or (3) drink no more than once a month and consume large amounts per typical drinking occasion (>2.70 oz. absolute alcohol – greater than 4 drinks).

Moderate/Heavy - Drink at least once a week and consume medium amounts per typical drinking occasion, or drink 3 to 4 times a month and consume large amounts per typical drinking occasion.

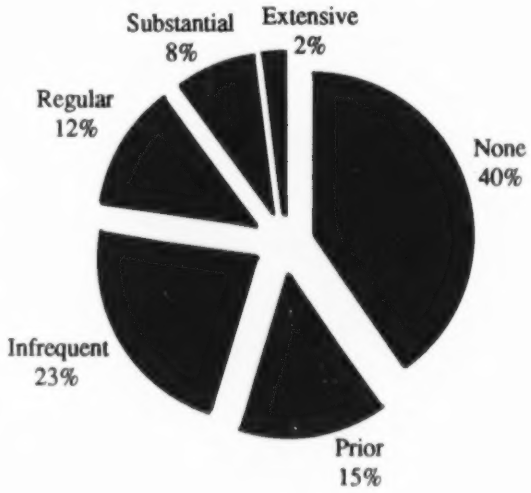
Heavy - Drink at least once a week and consume large amounts per typical drinking occasion.

Note: These are the results of a survey of 27,335 students in grades 7-12 conducted by the New York State Division of Substance Abuse Services and the Research Institute on Alcoholism, Division of Alcoholism and Alcohol Abuse, in spring 1983. Findings were statistically projected to reflect drug use among the 1,540,000 secondary school students enrolled in public and private schools during 1982-83.

Source: Barnes, 1984.

Figure 21

Level of Substance Use Among Students (Grades 7-12) New York State, 1983



Source: New York State Division of Substance Abuse Services, 1984.

Table 33

LEVEL OF SUBSTANCE USE AMONG STUDENTS BY GRADE NEW YORK STATE, 1983

(Number in 1,000s)

Level of Use[1]	Total Number	Total %	Grades 7&8 Number	Grades 7&8 %	Grades 9&10 Number	Grades 9&10 %	Grades 11&12 Number	Grades 11&12 %
Total	1,542	100%	527	100%	546	100%	469	100%
None	618	40	291	55	198	36	129	28
Prior	228	15	69	13	82	15	77	16
Infrequent	356	23	100	19	130	24	126	27
Regular	183	12	33	6	73	13	77	16
Substantial	127	8	25	5	49	9	53	11
Extensive	30	2	9	2	14	3	7	2

[1] Level of substance use is a classification of students that reflects the history and recency of drug use as well as the extent and frequency of use. Operational definitions are as follows:

None - Students who have never used any substance in their lifetime.

Prior - Students who have used at least one substance in their lifetime, but have not used any drug since school began in September 1982.

Infrequent - Students who report having used one or two substances since school began in September 1982, with only experimental or infrequent use (i.e., one to three times) reported in the 30 days preceding the survey.

Regular - Students who have used from three to six substances since school began in September, with no substance other than marijuana used more than three times in the past 30 days; also, students who use marijuana on the average of three times a week.

Substantial - Students who have used from seven to nine substances other than marijuana on a weekly basis; also, those who use marijuana on the average of more than once a day (40 or more times in the past month).

Extensive - Those who have used 10 or more substances since school began in September, or at least one substance other than marijuana more than once a day (40 or more times) in the month prior to the survey.

Note: These findings are from a survey of students in grades 7-12 conducted by the New York State Division of Substance Abuse Services in spring 1983. Findings were statistically projected to reflect drug use among the 1,540,000 secondary school students enrolled in public and private schools during 1982-83.

Source: New York State Division of Substance Abuse Services, 1984.

Table 34

TYPE OF SUBSTANCE USE AMONG STUDENTS BY GRADE NEW YORK STATE, 1983

(Number in 1,000s)

Type of Substance[1]	Total Number	Total %[2]	Grades 7&8 Number	Grades 7&8 %[2]	Grades 9&10 Number	Grades 9&10 %[2]	Grades 11&12 Number	Grades 11&12 %[2]
Marijuana	700	46%	125	24%	276	51%	299	64%
Cocaine[3]	209	14	31	6	79	14	99	21
PCP (Angel Dust)	82	5	15	3	34	6	33	7
Other Hallucinogens	154	10	18	4	60	11	76	16
Amyl/Butyl Nitrite	190	12	27	5	79	15	84	18
Other Inhalants	335	22	133	26	133	24	69	15
Heroin	43	3	15	3	18	3	10	2
Methadone (Illicit)	42	3	12	2	19	4	11	2
Tranquilizers[4]	189	12	33	6	77	14	79	17
Methaqualone[4]	123	8	19	4	50	9	54	12
Other Sedatives[4]	177	12	42	8	74	14	61	13
Stimulants[4]	377	25	62	12	142	26	173	37
Analgesics[4]	272	18	62	12	104	19	106	23
Cough Medicine[4]	182	12	72	14	71	13	39	8
"Look-Alikes"[4]	132	9	25	5	53	10	54	12

[1] "Other Hallucinogens" refers to such substances as LSD, mescaline and psilocybin; "Amyl/Butyl Nitrite," to such substances as Rush or Locker Room;
"Other Inhalants," to glue/solvents or sprays; "Tranquilizers," to such substances as Valium or Librium; "Methaqualone," essentially to Quaalude;
"Other Sedatives," to such substances as barbiturates, Tuinal, and Seconal; "Stimulants," to such substances as amphetamines or prescription diet pills; and "Analgesics," to such substances as codeine, Darvon, or Talwin.
"Look-Alikes" include pseudo-speed or double dex, as well as a variety of imitation pills.

[2] Percentage of students reporting that they had used the specific substance at least once in their lifetime.

[3] This study did not distinguish crack use from other cocaine use.

[4] Refers only to nonmedical use of prescription drugs, defined as use "on your own, without a doctor telling you to."

Note: These findings are from a survey of students in grades 7-12 conducted by the New York State Division of Substance Abuse Services (DSAS) in spring 1983. Findings were statistically projected to reflect drug use among the 1,540,000 secondary school students enrolled in public and private schools during 1982-83.

Source: New York State Division of Substance Abuse Services, 1984.

Table 35

LEVEL OF SUBSTANCE USE AMONG STUDENTS BY HEALTH SERVICE AREA (HSA) NEW YORK STATE, 1983

(Number in 1,000s)

	Western		Finger Lakes		Central & Southern Tier		Northeastern		Hudson Valley		New York City		Nassau-Suffolk	
Level of Use[1]	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Total	152	100%	113	100%	161	100%	124	100%	183	100%	537	100%	272	100%
None	67	44	45	40	71	44	48	38	68	37	211	39	108	40
Prior	23	15	17	15	26	16	18	15	26	14	81	15	37	14
Infrequent	31	20	26	23	31	19	28	23	45	25	132	25	63	23
Regular	13	9	11	10	18	11	17	14	23	13	66	12	35	13
Substantial	15	10	12	10	12	8	10	8	17	9	38	7	23	8
Extensive	3	2	2	2	3	2	3	2	4	2	9	2	6	2

[1] Level of substance use is a classification of students that reflects the history and recency of drug use as well as the extent and frequency of use. See Table 33 for operational definitions.

Note: These findings are from a survey of students in grades 7-12 conducted by the New York State Division of Substance Abuse Services in spring 1983. Findings were statistically projected to reflect drug use among the 1,540,000 secondary school students enrolled in public and private schools during 1982-83. Counties included in each health service area are listed in Technical Note E.

Source: New York State Division of Substance Abuse Services, 1984.

DISCHARGE DIAGNOSES FOR HOSPITALIZED CHILDREN

Hospital discharge diagnosis data are one of the few ways of measuring serious childhood morbidity available in New York State. Data concerning the leading causes of hospitalization for children in a particular age range can be useful for targeting primary and secondary prevention efforts, or uncovering a need for greater access to primary care services or improved parent education. Discharge diagnoses for selected diseases may provide the only measure of nonfatal illnesses available to a county. A count of discharges for particular diseases that signal problems in health care access or the environment can alert the health care system to needed interventions.

The hospital discharge data presented in this section were obtained from the New York State Department of Health's Statewide Planning and Research Cooperative System (SPARCS), which collects inpatient data from all general hospitals in New York State. (Data for emergency room or ambulatory care visits are not included in this data base.) Diagnoses are grouped into 83 major diagnostic categories (MDCs)* based on the principal diagnosis, providing an unduplicated case count of hospital admissions. It is important to note, however, that these are not unduplicated counts of children with these conditions who are hospitalized, since the same child may have more than one admission during a single year.

County-level variations in hospitalization rates for various MDCs may be influenced by the availability of hospital beds, local medical practice procedures, access to primary care services, and insurance coverage, thereby limiting the usefulness of cross-county comparisons. There are also differences among hospitals in the reliability of MDC coding.

SPARCS data for 1985 show that in the 0-4-year age group, congenital conditions and diseases of the newborn predominate, followed by respiratory problems and infectious and other diseases. (Hospital discharges for normal, mature newborns were excluded from consideration.) In the 5-9 age group, tonsil/adenoid problems and asthma are the leading discharge diagnosis categories. In the 10-14-year age group, injuries appear as the major cause of hospitalization. For 15-19-year-olds, reproductive-related admissions for females account for more than half of all hospitalizations; the other most frequent diagnoses for this age group are all injury related and are male dominated *(Table 36).*

**The Federal MDC codes were adopted for use by SPARCS in New York State in 1983. However, as these provide only 24 diagnosis categories, the Department of Health also uses its older codes, which contain 83 categories.*

146

147

Table 36

FIVE MOST FREQUENT HOSPITAL DISCHARGE DIAGNOSES FOR CHILDREN (0-19 YEARS) BY AGE AND SEX OF CHILD NEW YORK STATE, 1985

Diagnostic Category	Number of Discharges: Male	Female	Total
Age Less Than 1 Year			
1. Certain Diseases and Conditions Peculiar to Newborn Infants	10,855	9,586	20,441
2. Infectious Diseases	3,997	3,203	7,200
3. Bronchitis	3,356	1,944	5,300
4. Congenital Anomalies	2,637	1,673	4,310
5. Pneumonia	2,459	1,703	4,162
Ages 1-4			
1. Asthma	3,980	2,318	6,298
2. Disease of the Ear and Mastoid Process	3,044	1,958	5,002
3. Congenital Anomalies	2,939	1,300	4,239
4. Pneumonia	2,257	1,595	3,852
5. Acute Upper Respiratory Tract Infection and Influenza	2,111	1,193	3,304
Ages 5-9			
1. Hypertrophy of Tonsil and Adenoid	3,562	3,214	6,776
2. Asthma	2,489	1,537	4,026
3. Disease of the Ear and Mastoid Process	2,081	1,344	3,425
4. Fractures	1,760	946	2,706
5. Congenital Anomalies	1,630	653	2,283
Ages 10-14			
1. Fractures	2,699	1,021	3,720
2. Asthma	1,714	1,305	3,019
3. Hypertrophy of Tonsil and Adenoid	1,025	1,731	2,756
4. Internal Injuries of the Cranium, Chest, and Other Organs	1,705	639	2,344
5. Appendicitis	1,343	908	2,251
Ages 15-19			
1. Delivery With Complications	0	15,852	15,852
2. Abortion	0	9,106	9,106
3. Normal Delivery	0	8,082	8,082
4. Obstetrical Diseases of the Antepartum and Puerperium	0	6,643	6,643
5. Fractures	4,246	1,201	5,447

Source: New York State Department of Health, Statewide Planning and Research Cooperative System (SPARCS), 1987.

Table 37

HOSPITAL DISCHARGES FOR CHILDREN BY SELECTED PRIMARY DIAGNOSES NEW YORK STATE[1], 1985

Diagnosis	Rate Per 10,000 Children (0-19)[2]	# Discharges Among Children (0-19)	% of Discharges by Age: <1	1-4	5-9	10-14	15-19
Asthma	33.1	16,198	8%	36%	23%	17%	15%
Skull Fracture	17.2	8,434	5	10	22	25	38
Pneumonia	14.0	6,831	39	37	14	5	5
Otitis Media	5.4	2,655	41	41	10	4	3
Gastroenteritis	4.5	2,181	33	27	13	12	15
Tonsillitis	2.6	1,295	5	33	22	14	27
Dehydration	2.3	1,144	31	37	16	7	10
Salmonella	1.6	770	51	22	11	6	10
Mastoiditis	0.4	202	10	10	24	27	29
Hematoma	0.4	173	14	10	19	21	35
Respir. Infec.	0.3	124	32	40	10	7	10
Shigellosis	0.2	89	6	54	33	4	3
Path. E. Coli	0.1	48	54	17	6	6	17
Sinusitus	0.1	44	2	18	23	27	30
Streptococcus	0.0	20	40	15	10	20	15
Unspec. Gastro.	0.0	17	23	0	35	6	35

[1] Only New York State residents are included.

[2] "0.0" indicates a rate less than 0.05 per 10,000 children.

Note: There may be more than one discharge per child.

Source: New York State Department of Health, Statewide Planning and Research Cooperative System (SPARCS), 1987.

Table 38

HOSPITAL DISCHARGES FOR CHILDREN (0-19 YEARS) AND RATE PER 10,000 CHILDREN BY SELECTED PRIMARY DIAGNOSES

1985

	Asthma		Skull Injury		Pneumonia		Otitis Media		Gastro-enteritis	
County	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
New York State	16,198	33.1	8,434	17.2	6,831	14.0	2,655	5.4	2,181	4.5
New York City	10,303	53.2	2,813	14.5	3,806	19.6	1,516	7.8	585	3.0
Bronx	2,482	66.5	653	17.5	986	26.4	430	11.5	146	3.9
Kings	3,950	57.8	838	12.3	1,472	21.5	624	9.1	176	2.6
New York	2,061	70.4	451	15.4	475	16.2	195	6.7	105	3.6
Queens	1,453	30.3	687	14.3	708	14.8	199	4.2	132	2.4
Richmond	357	32.7	184	16.8	165	15.1	68	6.2	26	2.4
Rest of State	5,742	19.4	5,507	18.6	2,967	10.0	1,125	3.8	1,581	5.3
Albany	129	17.3	99	13.3	31	4.2	13	1.7	23	3.1
Allegany	19	10.9	35	20.1	51	29.3	6	3.5	5	2.9
Broome	79	13.7	129	22.3	91	15.8	32	5.5	21	3.6
Cattaraugus	68	25.2	59	21.9	48	17.8	8	3.0	29	10.7
Cayuga	54	22.9	50	21.2	37	15.7	15	6.4	3	1.3
Chautauqua	77	18.4	68	16.2	53	12.7	43	10.3	30	7.2
Chemung	25	9.0	36	13.0	33	11.9	8	2.9	18	6.5
Chenango	22	14.5	33	21.7	23	15.1	11	7.2	16	10.5
Clinton	21	8.5	31	12.6	16	6.5	7	2.8	19	7.7
Columbia	22	13.5	38	23.3	11	6.7	7	2.8	19	7.7
Cortland	100	66.6	30	20.0	38	25.3	37	24.6	5	3.3
Delaware	33	24.7	36	26.9	18	13.5	12	9.0	16	12.0
Dutchess	117	16.2	110	15.2	59	8.2	22	3.0	44	6.1
Erie	624	23.3	430	16.1	190	7.1	146	5.5	126	4.7
Essex	18	18.3	22	22.3	17	17.2	5	5.1	10	10.1
Franklin	22	16.5	34	25.6	21	15.8	3	2.3	12	9.0
Fulton	150	92.5	42	25.9	67	41.3	1	0.6	8	4.9
Genesee	78	43.8	46	25.9	58	32.6	26	14.6	6	3.4
Greene	13	11.9	25	22.9	4	3.7	2	1.8	3	2.7
Hamilton	3	24.3	4	32.4	1	8.1	0	0.0	0	0.0
Herkimer	31	15.4	41	20.4	35	17.4	7	3.5	20	9.9
Jefferson	58	21.2	72	26.3	37	13.5	42	15.4	47	17.2
Lewis	9	11.1	14	17.2	12	14.8	10	12.3	24	29.5
Livingston	22	12.1	24	13.2	10	5.5	4	2.2	8	4.4
Madison	40	18.2	34	15.5	47	21.4	10	4.5	17	7.7
Monroe	264	12.9	188	9.2	52	2.5	20	1.0	46	2.2
Montgomery	140	98.8	32	22.6	136	96.0	18	12.7	26	18.4
Nassau	550	16.8	572	17.5	137	4.2	78	2.4	105	3.2
Niagara	320	52.1	112	18.2	121	19.7	66	10.8	50	8.1
Oneida	84	11.7	158	22.0	62	8.6	28	3.9	48	6.7
Onondaga	191	14.3	182	13.6	47	3.5	42	3.1	35	2.6
Ontario	28	10.7	32	12.2	13	5.0	7	2.7	4	1.5
Orange	300	34.9	203	23.6	166	19.3	42	4.9	31	3.6
Orleans	35	30.1	23	19.8	38	32.7	2	1.7	7	6.0
Oswego	74	19.1	104	26.9	50	12.9	28	7.2	49	12.7
Otsego	43	24.6	33	18.9	38	21.7	14	8.0	17	9.7
Putnam	33	14.0	36	15.3	25	10.6	10	4.2	7	3.0
Rensselaer	70	15.6	96	21.4	55	12.2	6	1.3	23	5.1
Rockland	115	15.0	155	20.2	75	9.8	36	4.7	23	3.0
St. Lawrence	94	25.4	99	26.7	43	11.6	15	4.1	24	6.5
Saratoga	97	20.0	99	20.4	79	16.3	22	4.5	37	7.6
Schenectady	57	14.7	61	15.8	40	10.3	18	4.6	54	13.9
Schoharie	5	5.1	12	12.3	15	15.4	3	3.1	1	1.0
Schuyler	8	15.7	12	23.5	11	21.5	2	3.9	2	3.9
Seneca	9	9.9	18	19.8	6	6.6	5	5.5	6	6.6
Steuben	45	15.7	64	22.3	83	28.9	3	1.0	54	18.8
Suffolk	632	16.4	924	23.9	268	6.9	87	2.3	228	5.9
Sullivan	41	23.1	36	20.3	30	16.9	7	3.9	6	3.4
Tioga	9	5.9	27	17.7	11	7.2	5	3.3	9	5.9
Tompkins	30	11.0	52	19.1	30	11.0	10	3.7	18	4.1
Ulster	86	19.7	113	25.9	27	6.2	12	2.7	18	4.1
Warren	45	27.8	33	20.4	20	12.3	3	1.9	34	21.0
Washington	28	16.8	32	19.3	20	12.0	0	0.0	18	10.8
Wayne	66	24.5	54	20.1	46	17.1	3	1.1	17	6.3
Westchester	372	17.2	369	17.0	189	8.7	45	2.1	64	3.3
Wyoming	25	20.4	27	22.1	21	17.2	10	8.2	4	3.3
Yates	12	19.7	7	11.5	5	8.2	1	1.6	2	3.3
Unknown	153	0.0	76	0.0	152	0.0	105	0.0	88	0.0

Note: Includes only discharges for New York State residents.

Source: New York State Department of Health, Statewide Planning and Research Cooperative System (SPARCS), 1987.

LEAD POISONING

Lead is a toxic heavy metal of no demonstrable value to the human body. Adults as well as children may be adversely affected by the ingestion of lead, but children are much more susceptible to its harmful effects due to the greater vulnerability of the developing central nervous system and the greater absorption of lead by the immature intestinal system. The signs and symptoms of mild to moderate lead intoxication are vague and easily confused with other childhood disorders. The only way to identify asymptomatic lead poisoning is through specific screening.

A child is screened for evidence of lead poisoning by measuring the amount of erythrocyte protoporphyrin (EP) in the blood. Only a small amount of blood is needed for this test — drawn by a microcapillary tube from a simple prick of a finger. The sample can be analyzed in a laboratory using the extraction procedure, or in the field (or laboratory) using a hematofluorometer. If the amount of EP is equal to or greater than 35 ug/dl (micrograms per decaliter) of whole blood, a second test is used to measure the level precisely. A blood lead level equal to or greater than 25 ug/dl of whole blood is indicative of lead poisoning. Other diagnostic procedures and a patient history may be required by the physician to assess the lead poisoning "risk class" of the child. Each of the three positive risk classes — moderate, high, and urgent — requires increasingly stringent patient management and follow-up to reduce the level of risk.

If elevated lead levels are left uncontrolled, many organs may become impaired, including the kidney, liver, gastrointestinal tract, blood, and central and peripheral nervous systems. Such damage may result in delayed mental development, mental retardation, convulsions, coma, and possibly death. Even at relatively low concentrations, lead may cause attention disorders, learning disabilities, and other intellectual deficits *(DOH, Bureau of Child and Adolescent Health, 1987).*

The national objective for reducing the effects of lead poisoning established by the U.S. Department of Health and Human Services is that *"by 1990, 80% of [all] communities should experience a prevalence rate of lead toxicity of less than 500/100,000 [0.5%] among children ages six months to 5 years, especially ages six months to one year" (DHHS, 1980).* The prevalence rates for all New York State communities are unknown, because screening programs are targeted only to high-risk communities, and within those communities to children who are likely to have been exposed to lead in their environment.

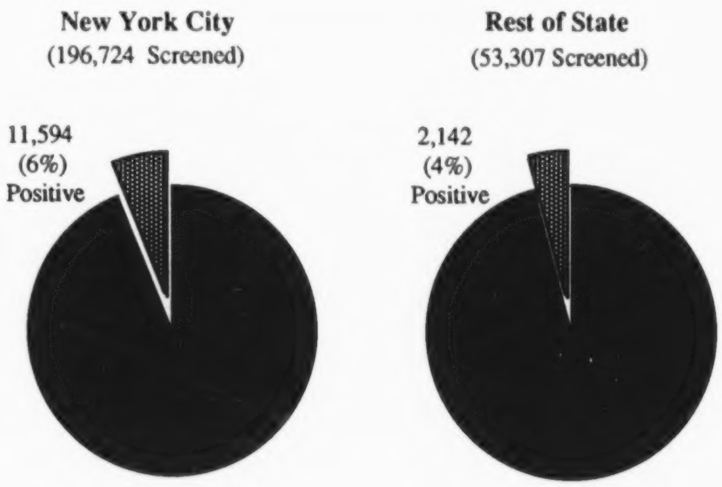
- Nationally, children from low-income families are at substantially higher risk of elevated lead levels than children from families with high incomes. Black children and children from inner cities also tend to have higher than average rates of elevated lead levels *(Annest, Mahaffey, Cox, & Roberts, 1982).*

- In 1985, over 250,000 children were screened for lead poisoning in New York State. Of the children screened in this effort (the largest such program in the nation), 13,736 were identified with positive screening results (Figure 22). The confirmed lead poisoning case rate for communities with screening programs outside New York City was 2.1 percent. In New York City, 5.9 percent of the children screened were referred for diagnostic evaluation. (Due to the overwhelming case load and problems with follow-up in New York City, the true positive rate is not available.) *(DOH, Bureau of Child and Adolescent Health, 1987.)*

- In New York State, an average of 2,523 children were under clinical management for lead poisoning during each quarter of 1985. The diagnostic risk class was reduced for 18 percent of these children each quarter *(DOH, Bureau of Child and Adolescent Health, 1987).*

Figure 22

Lead Poisoning 1985



Source: New York State Department of Health, Bureau of Child and Adolescent Health, 1987.

CANCER

Malignant neoplasms (cancer) cause more deaths of children than any other disease (Table 54). However, while the overall incidence of cancer did not decrease in New York State between 1969 and 1980, the probability of survival improved, as indicated by a decrease in the mortality rate of the most common childhood cancer, acute lymphatic leukemia *(Polednak, 1986).*

Most (62%) cancer in children aged 0-19 occurs in the blood (leukemia, 26%), the lymphatic system (19%), or the brain and spine (17%). The probability that the cancer will be located in these sites, however, differs by the age of the child. For example, in New York State, 43 percent of the children aged 1-4 years diagnosed with cancer had leukemia, compared with only 15 percent of those aged 15-19. Adolescents with cancer were most likely to have lymphomas, solid neoplasms of the lymph nodes. (These percentages are averages for 1978-1982.) *(DOH, New York State Cancer Registry, 1987.)*

Table 39

NEW REPORTED CANCER CASES AND RATES[1] AMONG CHILDREN FIVE-YEAR AVERAGE, 1978 - 1982

County	Average Annual Cases					Rates Per 100,000 Children				
		Age					Age			
	Total 0-19	0-4	5-9	10-14	15-19	Total 0-19	0-4	5-9	10-14	15-19
New York State	731	202	121	148	259	13.7	17.8	10.2	10.5	16.2
New York City	271	80	47	53	92	13.6	17.0	10.4	10.5	16.3
Bronx	49	14	8	11	15	12.7	16.1	9.1	11.5	13.9
Kings	95	30	17	16	32	13.5	16.9	10.2	9.3	16.8
New York	41	13	7	9	12	14.1	18.8	10.8	11.9	14.4
Queens	71	19	13	13	26	14.5	17.2	12.1	10.1	18.2
Richmond	15	3	2	4	6	13.0	13.9	7.5	12.0	18.3
Rest of State	459	122	75	95	168	13.8	18.4	10.1	10.5	16.2
Albany	10	2	2	2	4	11.6	10.9	10.4	11.6	12.9
Allegany	3	1	0	1	1	13.6	21.3	0.0	14.7	16.2
Broome	11	3	2	3	4	16.3	21.8	11.6	15.4	16.7
Cattaraugus	4	1	1	1	1	14.4	18.8	11.7	13.2	14.4
Cayuga	4	0	0	1	2	15.2	3.5	6.7	19.8	26.4
Chautauqua	6	2	1	2	2	13.4	18.0	9.6	13.6	12.7
Chemung	4	1	1	1	1	14.0	20.7	8.6	12.5	14.4
Chenango	3	1	0	1	1	20.1	32.6	5.2	12.9	29.6
Clinton	4	1	0	0	2	13.0	17.3	0.0	6.1	22.8
Columbia	1	0	0	0	0	3.4	0.0	4.8	4.1	3.8
Cortland	4	1	1	0	1	22.5	34.8	40.2	10.4	13.0
Delaware	2	0	0	0	1	13.1	12.9	12.2	10.9	15.2
Dutchess	10	2	1	2	5	12.3	14.3	4.7	7.5	20.7
Erie	41	14	6	8	14	13.4	22.3	8.6	9.1	14.7
Essex	1	0	0	0	1	10.4	17.6	0.0	6.2	17.5
Franklin	1	0	0	1	0	7.6	0.0	5.8	14.2	7.9
Fulton	2	1	0	0	1	11.4	15.9	9.6	8.4	12.3
Genesee	3	1	1	1	1	13.9	14.5	17.3	10.9	13.8
Greene	2	0	0	0	1	14.6	16.7	7.3	6.1	25.8
Hamilton	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Herkimer	3	0	1	1	2	15.7	8.7	12.0	14.4	24.6
Jefferson	5	2	1	1	1	17.9	24.0	17.1	15.1	16.4
Lewis	1	0	0	0	0	8.7	9.5	19.1	0.0	7.7
Livingston	2	0	0	0	1	11.3	5.3	9.8	8.3	17.6
Madison	2	1	0	0	1	7.5	17.8	0.0	3.4	9.3
Monroe	33	8	7	8	10	15.1	17.6	14.4	13.3	15.4
Montgomery	1	0	0	0	1	7.7	0.0	0.0	4.8	23.3
Nassau	59	14	9	12	24	15.2	19.7	10.9	11.4	18.8
Niagara	12	3	2	3	5	17.2	18.3	11.0	14.9	23.0
Oneida	10	2	1	3	4	11.9	9.7	5.6	13.9	16.4
Onondaga	19	6	3	3	7	12.8	19.4	9.4	8.8	14.2
Ontario	3	1	0	1	1	11.8	13.5	6.2	10.5	15.8
Orange	8	3	2	1	2	8.8	16.5	9.6	3.4	7.2
Orleans	2	1	0	0	1	15.2	22.2	13.4	5.6	20.6
Oswego	5	1	1	1	1	11.2	15.8	8.7	9.6	11.2
Otsego	2	1	0	0	1	12.9	23.1	5.5	4.6	16.8
Putnam	5	1	0	1	2	17.1	26.8	3.1	17.8	21.7
Rensselaer	7	2	1	1	3	15.1	22.3	9.3	10.9	17.9
Rockland	12	3	3	3	4	13.2	16.2	13.9	10.2	13.7
St. Lawrence	3	1	0	0	1	7.3	17.4	0.0	4.1	8.1
Saratoga	10	4	2	1	3	18.0	34.2	14.4	9.6	17.4
Schenectady	9	3	2	1	3	21.7	37.7	20.6	12.1	19.9
Schoharie	1	1	0	0	0	9.5	34.7	0.0	0.0	9.5
Schuyler	1	0	0	1	1	19.9	0.0	0.0	37.4	33.7
Seneca	1	1	0	0	0	13.1	36.6	0.0	14.3	6.2
Steuben	4	1	1	1	2	12.8	13.9	7.9	9.1	19.4
Suffolk	64	16	10	14	24	14.1	18.5	9.5	10.8	18.1
Sullivan	2	1	1	0	1	11.4	14.6	14.3	4.1	13.1
Tioga	2	0	0	1	1	8.9	5.3	4.9	11.9	11.7
Tompkins	3	1	0	0	2	11.8	20.8	8.6	3.7	13.1
Ulster	7	1	2	2	2	14.5	10.4	18.9	12.2	16.1
Warren	4	1	1	1	1	19.6	26.6	19.0	19.8	15.1
Washington	3	1	1	1	1	17.0	15.8	22.9	11.5	18.5
Wayne	4	1	0	2	1	13.7	22.0	2.9	20.2	10.0
Westchester	33	9	6	6	13	13.3	18.3	11.0	8.1	16.5
Wyoming	1	0	0	0	0	8.9	13.3	12.7	0.0	10.7
Yates	1	0	0	0	0	8.7	14.3	25.1	0.0	0.0

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[1] Variations in the incidence of cancer among the counties of New York State reflect true differences in the incidence of cancer as well as variations in the number of patients screened and differences in practices of diagnosing, treating, and recording cancers. The Registry contains data as they are reported by approximately 300 hospitals throughout the state.

Note: Cases in age groups may not sum to total due to rounding.

Source: New York State Department of Health, New York State Cancer Registry, 1987.

INFECTIOUS DISEASES

Infectious diseases present particular health concerns both for afflicted children and for the community at large. Such childhood diseases as measles, pertussis (whooping cough), diphtheria, tetanus, and polio may result in disability or even death for infants, children, and adults. Mumps, although rarely fatal, may have such long-term consequences as deafness and arthritis. Rubella (German measles), a generally mild infectious disease in children, may have devastating effects when contracted by a pregnant woman, because it often produces anomalies in developing fetuses *(Benenson, 1985).*

A highly effective immunization program in New York State (see the Health Care Access section of this report) has significantly reduced the incidence of these childhood diseases.Nevertheless, immunizing agents have not been developed for all infectious diseases. Public health efforts to control the spread of such infectious diseases as hepatitis and tuberculosis depend primarily on early detection and treatment, public education, and improved sanitation and nutrition *(Benenson, 1985).*

Hepatitis is a liver disease that appears in two forms: hepatitis A (formerly called infectious hepatitis) and hepatitis B (formerly called serum hepatitis). Each form has its own means of transmission. The hepatitis A virus enters through the mouth, multiplies in the body, and is passed in the feces. The virus may be carried on the infected person's hands and spread by direct contact or through the consumption of food or drink handled by an infected individual. Hepatitis A is a fairly common disease among children, but it is frequently not diagnosed because its symptoms (fatigue, poor appetite, fever, vomiting, or jaundice) may be very mild or even nonexistent *(DOH, Bureau of Communicable Disease Control, 1987).*

Hepatitis B, which is spread only by direct contact with body fluids, is rarely found in young children. Adolescents experimenting with intravenous drugs are at high risk of contracting hepatitis B if they share needles *(DOH, Bureau of Communicable Disease Control, 1987).*

Tuberculosis (TB) is a mycobacterial disease that generally affects the respiratory system but may also affect other organs, including kidneys, bones and joints, skin, intestines, and eyes. The tubercle bacilli are transmitted in the sputum of infected persons and (rarely in the USA) by ingestion of unpasteurized milk from infected cattle. The risk of developing TB is highest in children under 3 years old, lowest in later childhood, and high again in adolescents and young adults. Susceptibility to TB is increased among underweight or undernourished people *(Benenson, 1985).* Two newly identified populations with a higher than expected prevalence of TB are persons infected with the human immunodeficiency virus (HIV) and persons who are homeless. Since these populations are increasing in New York State, an increase in TB is expected *(DOH, Bureau of Communicable Disease Control, Tuberculosis Control Program, nd).*

Table 40

INCIDENCE OF IMMUNIZABLE DISEASES[1] AMONG CHILDREN (0-19 YEARS) 1985

County	Measles	Mumps	Pertussis	Polio	Rubella
New York State	148	214	151	1	194
New York City	80	32	26	1	184
Rest of State	68	182	125	0	10
Albany	0	3	4	0	0
Allegany	0	0	2	0	0
Broome	18	5	2	0	0
Cattaraugus	0	1	5	0	0
Cayuga	0	0	3	0	0
Chautauqua	0	2	4	0	0
Chemung	0	0	0	0	0
Chenango	0	1	3	0	0
Clinton	0	4	4	0	0
Columbia	0	0	0	0	0
Cortland	0	2	1	0	0
Delaware	0	0	5	0	0
Dutchess	0	3	0	0	0
Erie	6	18	14	0	1
Essex	0	0	1	0	0
Franklin	0	0	0	0	0
Fulton	0	0	0	0	0
Genesee	0	1	0	0	0
Greene	0	0	0	0	0
Hamilton	0	0	0	0	0
Herkimer	0	0	0	0	0
Jefferson	0	4	2	0	0
Lewis	0	0	2	0	0
Livingston	0	0	0	0	0
Madison	0	1	2	0	1
Monroe	0	0	5	0	0
Montgomery	0	0	4	0	0
Nassau	4	16	5	0	5
Niagara	6	0	2	0	1
Oneida	0	3	8	0	0
Onondaga	2	3	6	0	1
Ontario	12	1	1	0	0
Orange	0	61	0	0	0
Orleans	0	0	0	0	0
Oswego	0	2	1	0	0
Otsego	0	0	0	0	0
Putnam	0	0	0	0	0
Rensselaer	0	1	5	0	0
Rockland	0	22	2	0	0
St. Lawrence	0	0	4	0	0
Saratoga	0	0	1	0	0
Schenectady	0	1	1	0	0
Schoharie	0	0	0	0	0
Schuyler	0	0	0	0	0
Seneca	0	0	1	0	0
Steuben	0	3	4	0	0
Suffolk	4	12	6	0	0
Sullivan	0	1	0	0	0
Tioga	2	1	0	0	0
Tompkins	0	2	1	0	0
Ulster	0	1	2	0	0
Warren	0	0	1	0	0
Washington	0	0	1	0	0
Wayne	0	1	1	0	0
Westchester	14	5	9	0	1
Wyoming	0	1	0	0	0
Yates	0	0	0	0	0

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[1] In 1985, there was one reported case of tetanus in New York State, but the age was unknown. There were no reported cases of diphtheria among New York's children.

Source: New York State Department of Health, Bureau of Communicable Disease Control, 1987.

160

161

Table 41

INCIDENCE OF HEPATITIS AND TUBERCULOSIS AMONG CHILDREN (0-19 YEARS)
1985

County	Hepatitis A (Infectious)[1]	Hepatitis B (Serum)[1]	Tuberculosis
New York State	*	*	154
New York City	*	*	117
Rest of State	249	82	37
Albany	2	7	3
Allegany	2	0	0
Broome	8	2	0
Cattaraugus	1	1	1
Cayuga	0	1	0
Chautauqua	7	0	0
Chemung	0	1	0
Chenango	1	0	0
Clinton	0	0	0
Columbia	0	1	0
Cortland	0	0	0
Delaware	0	0	0
Dutchess	4	3	0
Erie	2	7	1
Essex	0	0	0
Franklin	0	0	0
Fulton	0	0	0
Genesee	0	0	0
Greene	0	0	0
Hamilton	0	0	0
Herkimer	1	0	0
Jefferson	0	0	0
Lewis	0	0	0
Livingston	1	0	0
Madison	0	0	0
Monroe	6	7	7
Montgomery	0	0	0
Nassau	7	8	4
Niagara	0	1	0
Oneida	0	0	0
Onondaga	1	4	1
Ontario	0	0	0
Orange	80	3	0
Orleans	0	0	0
Oswego	0	2	1
Otsego	0	0	0
Putnam	0	1	0
Rensselaer	0	1	0
Rockland	91	2	4
St. Lawrence	1	0	0
Saratoga	0	0	0
Schenectady	0	0	0
Schoharie	0	0	0
Schuyler	0	0	0
Seneca	0	0	0
Steuben	2	0	1
Suffolk	10	18	2
Sullivan	12	0	2
Tioga	1	0	0
Tompkins	0	1	0
Ulster	2	1	1
Warren	0	0	0
Washington	0	0	1
Wayne	0	1	0
Westchester	5	9	8
Wyoming	1	0	0
Yates	1	0	0

[1] Data for New York City are incomplete.

Source: New York State Department of Health, Bureau of Communicable Disease Control, 1986c.

SEXUALLY TRANSMISSIBLE DISEASES

Sexually transmissible diseases (STDs) and their complications are a major cause of morbidity among females 15-19 years of age in New York State. While the incidence of gonorrhea among New York State females (exclusive of New York City) in the 20-24 and 25-29 age groups has decreased since 1981, the incidence has actually increased in the 15-19 age group.*

Pelvic inflammatory disease, a major complication of women infected with STDs, will occur in approximately 1,000 New York State women this year, resulting in significant future infertility and medical costs of $7 million (estimates generated by DOH, STD Control Program).

Although many STDs can be transmitted from mother to child either in utero or during the birthing process, there are several that are of particular importance because of their danger to newborns. Chlamydia, a condition not yet reportable in New York State, is responsible for an estimated 4.6 million infections annually in the United States. Nationally, *Chlamydia* is the leading cause of neonatal eye infections and a major cause of febrile pneumonia in infants under three months of age *(Mason, 1986)*. Congenital syphilis, though preventable and therefore uncommon, is a devastating infection for the newborn *(Centers for Disease Control [CDC], 1986)*. A third STD, herpes, is usually transmitted to the newborn by contact with vaginal secretions during birth. Infants infected with herpes have high mortality rates, and survivors suffer from a variety of conditions such as herpes encephalitis *(Holmes, Mardh, Sparling, and Wiesner, 1984)*.

- In 1985, 15-19-year-olds in counties outside New York City had the highest incidence of gonorrhea infection of any female age group, 664.1 per 100,000, versus 150.1 per 100,000 for all ages *(DOH, Sexually Transmitted Disease Control Program, 1986)*.
- Approximately 9.8 percent of pregnant women are infected with *Chlamydia* annually, resulting in an estimated 120,000 infected infants, causing 74,000 cases of conjunctivitis and 37, 000 cases of pneumonia in infants annually in the United States *(Mason, 1986)*.
- In 1985 there were 466 reported cases of syphilis in children aged 0-19 in New York State (see Table 42), including 60 reports of congenital syphilis. In 1985 New York's reports comprised 23 percent of all reports of congenital syphilis (259) in the United States *(CDC, 1986)*.
- It is estimated that each year 500 infants are infected with herpes in the United States (approximately one in every 7,500 live births) *(Holmes et al., 1984)*.

**Incidence rates for reportable STDs are based on numbers generated by the New York State Communicable Disease Surveillance System. STDs are underreported by percentages that vary from county to county. Therefore, the New York State and county figures underestimate the outcome incidence of these diseases. Because of the differences in the extent of reporting, county comparisons should not be made unless there is reason to believe that rates of underreporting are similar.*

Table 42

REPORTED CASES OF GONORRHEA AND SYPHILIS IN CHILDREN (0-19 YEARS)
1985

County	Gonorrhea		Syphilis	
	Number	Rate per 10,000 Children	Number	Rate per 10,000 Children
New York State	13,124	26.8	446	0.9
New York City	7,980	41.2	366	1.9
Rest of State	5,144	17.4	80	0.3
Albany	300	40.2	1	0.1
Allegany	4	2.3	0	0.0
Broome	51	8.8	0	0.0
Cattaraugus	10	3.7	1	0.4
Cayuga	10	4.2	0	0.0
Chautauqua	51	12.2	0	0.0
Chemung	72	26.0	2	0.7
Chenango	3	2.0	0	0.0
Clinton	34	13.8	0	0.0
Columbia	13	8.0	0	0.0
Cortland	6	4.0	0	0.0
Delaware	7	5.2	0	0.0
Dutchess	160	22.2	13	1.8
Erie	983	36.7	5	0.2
Essex	2	2.0	0	0.0
Franklin	0	0.0	0	0.0
Fulton	3	1.8	1	0.6
Genesee	6	3.4	0	0.0
Greene	1	0.9	0	0.0
Hamilton	1	8.1	0	0.0
Herkimer	6	3.1	0	0.0
Jefferson	19	6.9	0	0.0
Lewis	0	0.0	0	0.0
Livingston	4	2.2	0	0.0
Madison	12	5.5	0	0.0
Monroe	1,111	54.3	8	0.4
Montgomery	10	7.1	1	0.7
Nassau	412	12.6	11	0.3
Niagara	97	15.8	0	0.0
Oneida	68	9.5	0	0.0
Onondaga	487	36.4	6	0.4
Ontario	35	13.3	0	0.0
Orange	73	8.5	4	0.5
Orleans	6	5.2	0	0.0
Oswego	30	7.7	0	0.0
Otsego	18	10.3	4	2.3
Putnam	4	1.7	0	0.0
Rensselaer	64	14.2	0	0.0
Rockland	40	5.2	2	0.3
St. Lawrence	8	2.2	0	0.0
Saratoga	19	3.9	0	0.0
Schenectady	38	9.8	1	0.3
Schoharie	4	4.1	0	0.0
Schuyler	2	3.9	0	0.0
Seneca	8	8.8	0	0.0
Steuben	38	13.2	0	0.0
Suffolk	328	8.5	8	0.2
Sullivan	14	7.8	2	1.1
Tioga	9	5.9	0	0.0
Tompkins	22	8.1	0	0.0
Ulster	20	4.6	0	0.0
Warren	8	4.9	0	0.0
Washington	4	2.4	0	0.0
Wayne	34	12.6	2	0.7
Westchester	366	16.9	8	0.4
Wyoming	3	2.5	0	0.0
Yates	6	9.9	0	0.0

Source: New York State Department of Health, Bureau of Communicable Disease Control, 1986c.

Table 43

REPORTED CASES OF GONORRHEA BY AGE OF CHILD
1985

County	0-9 Years	10-14 Years	15-19 Years
New York State	183	501	12,574
New York City	134	269	7,711
Rest of State	49	232	4,863
Albany	1	19	280
Allegany	0	0	4
Broome	0	1	50
Cattaraugus	2	1	7
Cayuga	0	1	9
Chautauqua	0	0	51
Chemung	1	9	62
Chenango	0	0	3
Clinton	0	0	34
Columbia	0	1	12
Cortland	0	0	6
Delaware	0	0	7
Dutchess	0	3	157
Erie	10	40	933
Essex	0	0	2
Franklin	0	0	0
Fulton	0	0	3
Genesee	0	0	6
Greene	0	0	1
Hamilton	0	0	1
Herkimer	1	1	4
Jefferson	1	3	15
Lewis	0	0	0
Livingston	0	0	4
Madison	0	0	12
Monroe	11	81	1,019
Montgomery	0	0	10
Nassau	4	9	399
Niagara	1	1	95
Oneida	0	4	64
Onondaga	1	11	475
Ontario	0	2	33
Orange	4	3	66
Orleans	0	0	6
Oswego	0	2	28
Otsego	0	0	18
Putnam	0	0	4
Rensselaer	0	7	57
Rockland	0	0	40
St. Lawrence	0	0	8
Saratoga	0	1	18
Schenectady	1	0	37
Schoharie	0	0	4
Schuyler	0	0	2
Seneca	0	0	8
Steuben	1	0	37
Suffolk	3	15	310
Sullivan	0	0	14
Tioga	0	1	8
Tompkins	0	0	22
Ulster	0	1	19
Warren	0	0	8
Washington	0	0	4
Wayne	0	1	33
Westchester	7	14	345
Wyoming	0	0	3
Yates	0	0	6

Source: New York State Department of Health, Bureau of Communicable Disease Control, 1986c.

AIDS

Acquired Immune Deficiency Syndrome (AIDS), caused by the human immunodeficiency virus (HIV), is a disease that breaks down part of the body's immune system, rendering the individual susceptible to a variety of illnesses that can be fatal. Children with HIV infection suffer high levels of morbidity and mortality. Although they constitute a very small proportion of AIDS cases, the number of children with AIDS is expected to increase as more women become infected *(Laurence, 1987).* At the present time there is no known cure for AIDS. Education has been the most effective means of prevention.

The HIV infection progresses differently in children than in adults. Common symptoms and illnesses of children include failure to thrive, anemia, swelling of the parotid gland, recurrent bacterial infections, central nervous system abnormalities, and lymphoid interstitial pneumonia. Whereas central nervous system abnormalities occur in a majority of children with AIDS, Kaposi's sarcoma, found in over one-fifth of infected adults, is uncommon in children *(Johns Hopkins University, Population Information Program, 1986; Oleske, 1987; Scott, 1987).*

According to the Surgeon General's "Workshop on Children With HIV Infection and Their Families," congenital HIV transmission is closely related to the spread of HIV infection among intravenous drug users and their sexual partners, partners of bisexual men, and — to an increasing degree — among the heterosexual population *(DHHS, Division of Maternal and Child Health, Surgeon General's Workshop, 1987).*

Infants and children become infected with AIDS primarily by transmission from infected mothers during pregnancy or at birth or from receipt of contaminated blood or blood products. Contrary to popular suspicion, there are no reported cases of child-to-child transmission through biting, sharing food, or nonsexual physical contact. Teenagers become infected primarily by sexual activity with infected partners, transfusion with contaminated blood or blood products, or sharing contaminated needles. There is rising concern that feelings of invulnerability and risk-taking behaviors among adolescents will lead to rapidly increasing rates of HIV seropositivity in this population.

It is estimated that from 20 to 50 percent of all children born to infected mothers will themselves be infected *(Johns Hopkins University, 1986).* In addition to their medical needs, infants infected with AIDS have special needs when their mothers also have the disease and may be unable to provide needed care. Parents' drug abuse may also place stress on the family.

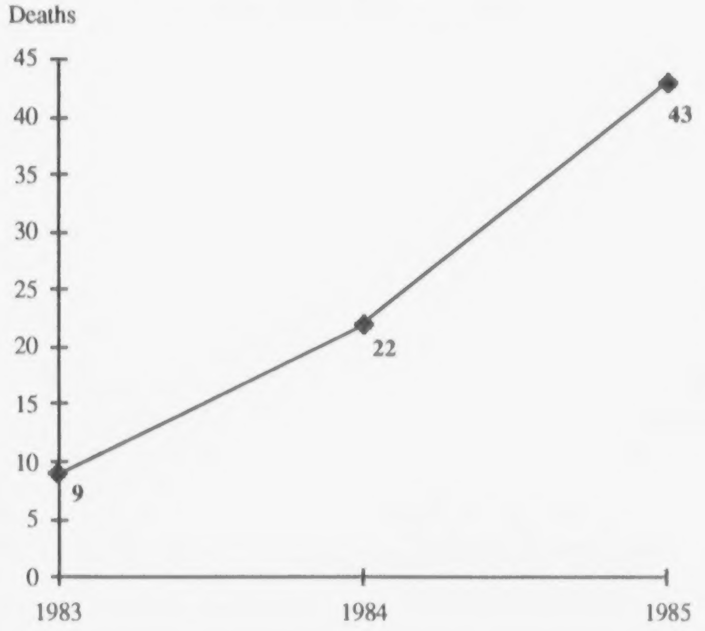
- In 1987 in New York City, 87 percent of the 221 children under 13 years of age with AIDS contracted the disease from their mothers. Most (78%) of the transmitting mothers were intravenous (IV) drug users or sexually involved with IV drug users. Among the 34 youth 13-19 years of age with AIDS, sexual activity with infected partners was the most common means of AIDS transmission (44%), followed by transfusion with contaminated blood or blood products (30%). Intravenous drug use was associated with 15 percent of the adolescent AIDS cases in New York City *(New York City Department of Health, AIDS Surveillance Unit, 1987, 1988).*

- Over 90 percent of the mothers of New York City AIDS patients under 13 years of age (excluding transfusion-associated cases), were either black or Hispanic *(New York City Department of Health, AIDS Surveillance Unit, 1987).*

- The number of children with AIDS has been increasing. As of July 1986, there were 300 children in the United States infected with AIDS. The majority of cases have occurred in New York, New Jersey, California, and Florida *(DOH, Bureau of Communicable Disease Control, 1986a).*

Figure 23

Deaths Attributed to AIDS Among Children (0-19 Years) New York State, 1983, 1984, 1985



Note: These are deaths attributed exclusively to the ICD-9 code used for AIDS (279.1). It is likely that this undercounts the number of children with AIDS who died between 1983 and 1985.

Source: New York State Department of Health, Bureau of Biostatistics, 1986.

Table 44

CUMULATIVE CASES[1] OF AIDS MARCH 1983[2] THROUGH DECEMBER 1985

County	Total	Age			
		0-4	5-9	10-14	15-19
New York State	145	112	9	4	20
New York City	129	106	7	2	14
Bronx	38	34	3	0	1
Kings	35	27	0	0	8
New York	38	30	3	1	4
Queens	17	14	1	1	1
Richmond	1	1	0	0	0
Rest of State	16	6	2	2	6
Chemung	1	0	0	0	1
Greene	1	0	0	0	1
Onondaga	2	1	0	0	1
Rockland	2	0	1	0	1
Suffolk	7	3	1	2	1
Westchester	2	1	0	0	1
Putnam	1	1	0	0	0

[1] Many of these children were no longer living in December 1985.

[2] Voluntary reporting began in March 1983. Mandatory reporting began in October 1983.

Source: New York State Department of Health, Bureau of Communicable Disease Control, 1987.

HIGH-RISK INFANT FOLLOW-UP

Early detection of developmental disabilities is important so that services can be provided to children and their families to eliminate or lessen conditions deleterious to the child's growth and development. The New York State Infant Health Assessment Program (IHAP) was initiated to provide resources to families with children at risk of developmental disabilities. The program's objectives are as follows:

- to identify infants and young children at high risk for physical and mental developmental disabilities
- to facilitate the follow-up of high-risk children by local health unit personnel to insure that needed services are received in a timely and coordinated fashion
- to determine the magnitude and nature of morbidity among the high-risk population
- to provide public and private health care, social services, and educational agencies with information on the geographic and chronologic distribution of the high-risk population

Eligibility for IHAP's case management services is based on a core set of criteria. Counties that participate in the IHAP program are required to register infants that meet any of these criteria. Individual counties willing to expand eligibility to additional children may identify and apply additional (optional) criteria. Required reporting criteria include the following:

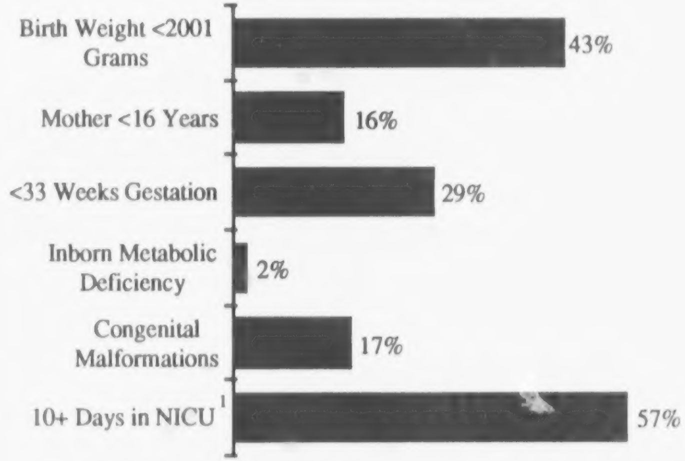
— birth weight less than 2,001 grams
— maternal age less than 16 years
— gestational age of less than 33 weeks
— presence of an inborn metabolic defect
— presence of a major congenital anomaly
— ten or more days in a neonatal intensive care unit

In participating counties, any infant who meets one or more of these criteria is to be registered by the local health department. Categories of optional conditions established by counties include evidence of parenting problems and maternal drug or alcohol abuse.

The Infant Health Assessment Program is active in all counties outside of New York City. In New York City the program operates in eleven municipal hospitals and one private hospital and therefore is not available to all city residents. The goal for IHAP in New York City is expansion to citywide implementation.

Figure 24

Reasons for Infants' Registration in the IHAP Program
New York State Excluding New York City
1985 Births
(Required Reporting Only, N = 4,216)



[1] Neonatal intensive care unit.

Source: New York State Department of Health, Bureau of Child and Adolescent Health, 1987.

Table 45

INFANT HEALTH ASSESSMENT PROGRAM (IHAP)
NEW YORK STATE EXCLUDING NEW YORK CITY
1985

	Number of Infants Registered			% Registered by Eligibility Criteria[1]					
County	Total	Optional Criteria[2]	Required Criteria	<2001 Grams	Mother <16 Years	<33 Weeks Gest	IMD[3]	Cong Mal[4]	10+ Days in NICU[5]
Total	5,301	1,085	4,216	48%	16%	29%	2%	17%	57%
Albany	147	16	131	42	13	26	0	23	66
Allegany	36	10	26	38	12	19	0	38	54
Broome	147	44	103	43	11	18	4	20	63
Cattaraugus	61	24	37	57	8	41	0	24	78
Cayuga	41	10	31	45	19	29	6	23	26
Chautauqua	47	4	43	44	7	30	2	14	74
Chemung	48	3	45	31	27	16	2	22	47
Chenango	25	2	23	43	4	13	4	30	61
Clinton	45	9	36	56	3	25	0	25	86
Columbia	19	3	16	25	38	19	0	6	44
Cortland	23	7	16	63	13	31	0	19	63
Delaware	26	1	25	28	8	12	0	24	68
Dutchess	66	0	66	44	23	30	2	15	47
Erie	631	27	604	51	20	32	1	9	63
Essex	20	7	13	46	8	15	0	23	46
Franklin	41	15	26	35	8	15	0	27	69
Fulton	26	1	25	52	16	36	0	8	72
Genesee	26	2	24	33	17	21	0	17	50
Greene	21	3	18	39	17	22	6	11	44
Hamilton	2	0	2	**	0	50	0	0	50
Herkimer	22	1	21	52	10	24	0	24	57
Jefferson	65	8	57	49	11	28	0	23	49
Lewis	15	3	12	42	8	33	0	42	42
Livingston	28	2	26	42	0	27	4	35	62
Madison	50	9	41	44	15	24	0	27	63
Monroe	385	16	369	42	20	29	2	10	68
Montgomery	24	3	21	38	0	14	0	29	48
Nassau	505	175	330	62	10	38	4	14	57
Niagara	127	16	111	41	18	33	0	16	67
Oneida	108	1	107	50	14	26	0	12	69
Onondaga	292	24	268	54	21	30	2	12	53
Ontario	46	1	45	44	7	24	2	27	40
Orange	358	230	128	40	22	22	1	18	63
Orleans	30	11	19	32	5	21	5	32	68
Oswego	70	10	60	35	22	23	0	23	25
Otsego	29	7	22	45	14	41	0	32	64
Putnam	4	0	4	25	0	25	0	50	50
Rensselaer	99	20	79	52	23	29	0	5	48
Rockland	27	2	25	72	0	44	0	28	44
St. Lawrence	123	63	60	38	20	18	0	28	48
Saratoga	84	8	76	38	28	20	3	7	68
Schenectady	84	17	67	49	18	34	0	12	55
Schoharie	21	0	21	33	14	19	0	19	57
Schuyler	15	3	12	8	17	25	0	25	67
Seneca	11	0	11	55	0	45	0	9	**
Steuben	42	3	39	41	21	15	0	23	41
Suffolk	474	109	365	56	15	30	3	19	63
Sullivan	37	7	30	37	3	13	10	37	63
Tioga	153	105	48	23	4	27	0	52	40
Tompkins	46	16	30	47	10	20	3	30	53
Ulster	45	8	37	62	22	38	0	14	41
Warren	24	3	21	33	19	19	5	24	62
Washington	37	9	28	29	18	25	0	14	64
Wayne	54	2	52	54	12	40	2	21	73W
Westchester	248	2	246	53	18	42	0	24	21
Wyoming	14	1	13	23	0	8	0	31	69
Yates	7	2	5	60	0	40	0	20	60

[1] Criteria for required reporting only. Since children may be registered for more than one reason, percentages sum to more than 100%.

[2] Counties may add eligibility criteria (e.g. drug/alcohol abuse) that are not required by the state.

[3] Inborn metabolic deficiency.

[4] Congenital malformation.

[5] Neonatal intensive care unit.

Source: New York State Department of Health, Bureau of Child and Adolescent Health, 1987.

DEVELOPMENTAL DISABILITIES

New York State Mental Hygiene Law (Chapter 978, Section 1.03[22]) characterizes a developmental disability as follows:

(1) is attributable to mental retardation, cerebral palsy, epilepsy, neurological impairment, autism, or other condition closely related to mental retardation;

(2) originates before the person reaches eighteen years of age;

(3) is expected to continue indefinitely; and

(4) substantially limits a person's ability to function normally in three or more of the following areas: learning, receptive and expressive language, mobility, self-care, self-direction, economic self-sufficiency, and capacity for independent living *(New York State Developmental Disabilities Planning Council & New York State Office of Mental Retardation and Developmental Disabilities, 1986).*

Categorical conditions are defined by the New York State Office of Mental Retardation and Developmental Disabilities *(1987)* as follows:

> ***Mental Retardation*** *refers to sub-average intellectual functioning and is associated with impairment in adaptive behavior.*
>
> ***Epilepsy*** *is characterized by unusual, undirected release of electrical impulses in the brain causing uncontrolled movement, behavior and partial/total loss of consciousness.*
>
> ***Cerebral Palsy*** *refers to the impairment of motor function due to brain damage during the prenatal or postnatal period.*
>
> ***Autism*** *is associated with a difficulty in relating to other people, events, and objects. It is also characterized by several disorders grouped together that interfere with intellectual and language development. These characteristics develop before a child is 30 months old.*
>
> ***Neurological Impairments*** *refer to disorders of the brain and central nervous system that substantially impair the use and development of language understanding, memory, attention span, fine muscle control and adaptive behavior.*

An individual is considered to have a "substantial" developmental disability if (s)he has a severe form of one or more of these conditions.

New York State has no mandated reporting of children with developmental disabilities. Therefore, an accurate count of these children does not exist. In order to plan for the fiscal and service needs of children with developmental disabilities, however, the New York State Office of Mental Retardation and Developmental Disabilities (OMRDD) periodically constructs estimates of this population based on general population projections and the prevalence rates of developmental disabilities.

- In 1985, it was estimated that 6 of every 1,000 children in New York State under 21 years of age had a substantial developmental disability *(New York State Office of Mental Retardation and Developmental Disabilities, Division of Program Planning and Policy Analysis, 1986).*

Table 46

ESTIMATED NUMBER OF CHILDREN WITH A "SUBSTANTIAL" DEVELOPMENTAL DISABILITY[1] BY AGE 1985

County	Total	0-2 Yrs.	3-4 Yrs.	5-20 Yrs.
New York State	32,395	3,411	3,172	26,812
New York City	13,447	1,379	1,295	10,773
Bronx	2,517	271	255	1,991
Kings	4,706	508	475	3,723
New York	2,222	222	209	1,791
Queens	3,272	312	293	2,667
Richmond	730	66	63	601
Rest of State	19,948	2,032	1,877	16,039
Albany	666	48	48	570
Allegany	122	10	10	102
Broome	400	39	38	323
Cattaraugus	184	18	17	149
Cayuga	150	16	14	120
Chautauqua	261	28	27	206
Chemung	179	20	19	140
Chenango	98	10	10	78
Clinton	176	18	15	143
Columbia	113	13	13	87
Cortland	112	10	10	92
Delaware	95	8	8	79
Dutchess	466	45	43	378
Erie	1,807	188	176	1,443
Essex	60	6	6	48
Franklin	72	8	8	56
Fulton	105	10	10	85
Genesee	117	11	11	95
Greene	75	8	6	61
Hamilton	10	2	2	6
Herkimer	118	12	11	95
Jefferson	168	19	16	133
Lewis	44	6	5	33
Livingston	129	16	15	98
Madison	155	13	12	130
Monroe	1,382	147	139	1,096
Montgomery	88	10	10	68
Nassau	2,074	205	193	1,676
Niagara	391	42	39	310
Oneida	477	52	48	377
Onondaga	901	98	92	711
Ontario	302	95	56	151
Orange	561	50	48	463
Orleans	82	8	8	66
Oswego	270	23	23	224
Otsego	114	8	8	98
Putnam	154	14	13	127
Rensselaer	288	34	31	223
Rockland	493	47	43	403
St. Lawrence	250	20	18	212
Saratoga	333	31	29	273
Schenectady	263	27	26	210
Schoharie	60	7	7	46
Schuyler	38	4	3	31
Seneca	61	6	6	49
Steuben	189	19	16	154
Suffolk	2,511	232	220	2,059
Sullivan	118	13	12	93
Tioga	187	13	13	161
Tompkins	205	15	16	174
Ulster	330	36	33	261
Warren	114	13	12	89
Washington	104	10	10	84
Wayne	173	16	16	141
Westchester	1,419	137	128	1,154
Wyoming	97	14	8	75
Yates	37	4	3	30

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[1] "Substantial" developmental disability is defined as a severe form of one or more of the five categorical groups of developmental disabilities: autism, cerebral palsy, epilepsy, mental retardation, or neurological impairment.

Source: New York State Office of Mental Retardation and Developmental Disabilities, Divison of Program Planning and Policy Analysis, 1986.

STUDENTS WITH HANDICAPPING CONDITIONS

School-age children with handicapping conditions severe enough to prevent them from fully participating in all aspects of their educational program are evaluated by local Committees on Special Education (CSE) and assigned individualized education programs. These students may receive their education in regular classrooms supplemented with special services or they may be assigned to special classes equipped to deal with their needs on a full-day basis. Those whose needs cannot be met by special classes may be placed in a residential facility.

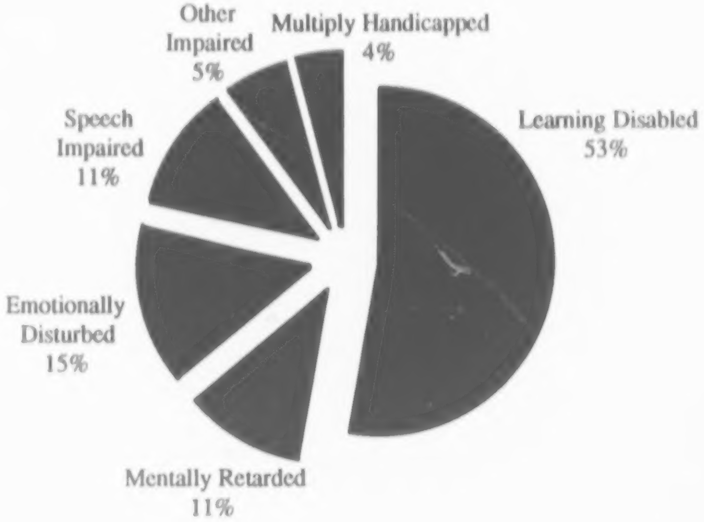
- Between the school years 1975-76 and 1985-86, the number of students in special education programs increased by 24 percent despite a 24 percent decline in the total student population. In addition to changes in the number of children with handicapping conditions, the increase reflects changes in legislation, New York State Education Department policy, and state appropriations for special education *(CCF, 1988)*.

- Approximately 9 percent of the student population in the 1985-86 school year were enrolled in special education programs for students with handicapping conditions *(CCF, 1988)*.

Figure 25

Students with Handicapping Conditions New York State, 1985

(N = 266,157)



Source: New York State Education Department, Information Center on Education, 1986c.

182

183

Table 47

STUDENTS (5-21 YEARS) WITH HANDICAPPING CONDITIONS[1]
1985

County	Total	Emotionally Disabled	Mentally Retarded	Learning Disabled	Speech Imp.	Other Imp.[2]	Multiply Handicapped
New York State	266,157	40,819	28,475	142,165	30,005	15,485	9,208
New York City	106,363	17,051	7,914	65,081	5,069	8,264	2,984
Rest of State	159,794	23,768	20,561	77,084	24,936	7,221	6,224
Albany	3,017	507	584	747	880	203	96
Allegany	655	64	150	315	84	24	18
Broome	2,272	285	350	1,144	274	118	101
Cattaraugus	1,126	51	269	600	110	62	34
Cayuga	995	120	262	359	182	38	34
Chautauqua	2,339	194	480	873	565	151	76
Chemung	1,213	205	253	484	177	71	23
Chenango	1,062	187	161	478	186	34	16
Clinton	1,208	160	215	395	362	58	18
Columbia	751	64	106	407	112	38	24
Cortland	819	102	113	372	166	25	41
Delaware	573	60	175	256	43	20	19
Dutchess	3,661	686	452	1,870	247	188	218
Erie	17,422	1,826	2,375	7,462	4,772	604	383
Essex	347	29	83	176	25	16	18
Franklin	702	76	134	309	109	36	38
Fulton	719	52	246	246	118	30	27
Genesee	1,046	162	112	530	180	40	22
Greene	437	28	85	258	36	13	17
Hamilton	44	4	6	29	0	3	2
Herkimer	1,117	62	193	481	321	39	21
Jefferson	1,090	62	382	476	57	50	63
Lewis	227	6	79	99	15	10	18
Livingston	1,106	132	124	615	139	39	57
Madison	1,102	39	272	481	214	43	53
Monroe	11,139	1,886	1,343	5,075	2,048	474	313
Montgomery	576	36	148	263	74	35	20
Nassau	17,839	3,458	1,595	8,703	2,194	980	909
Niagara	3,248	425	494	1,561	475	71	222
Oneida	3,562	395	668	1,478	756	152	113
Onondaga	6,693	1,015	792	3,202	1,065	324	295
Ontario	1,460	122	248	736	250	61	43
Orange	4,477	825	556	2,334	407	197	158
Orleans	676	25	120	297	198	14	22
Oswego	2,042	224	378	838	447	90	65
Otsego	672	101	140	314	69	27	21
Putnam	1,594	350	51	895	192	62	44
Rensselaer	1,691	139	398	689	275	116	74
Rockland	3,543	680	327	2,094	129	191	122
St. Lawrence	1,479	131	365	705	161	79	38
Saratoga	1,857	158	261	944	253	90	151
Schenectady	1,780	440	228	557	370	112	73
Schoharie	491	35	72	304	45	23	12
Schuyler	180	19	47	103	1	2	8
Seneca	554	18	76	305	119	20	16
Steuben	1,505	132	325	725	198	85	40
Suffolk	25,821	4,328	1,855	14,382	3,056	1,190	1,010
Sullivan	1,021	134	115	419	144	32	177
Tioga	793	56	151	387	160	25	14
Tompkins	1,025	60	97	597	196	46	29
Ulster	2,200	432	313	986	323	63	83
Warren	795	70	173	318	156	31	47
Washington	918	98	178	445	78	30	89
Wayne	2,112	236	350	1,037	362	71	56
Westchester	12,179	2,524	930	6,585	1,126	558	456
Wyoming	558	45	56	252	129	11	65
Yates	264	8	50	92	106	6	2

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[1] Students identified by local Committees on Special Education as requiring individualized education programs.

[2] Other impairments include autism, deafness and vision, orthopedic, and other impairments.

Source: New York State Education Department, Information Center on Education, 1986c.

RESIDENTIAL CARE

New York State is committed to treating children with physical, mental, or emotional problems in the least restrictive environment possible. The enactment of the Child Welfare Reform Act in 1979 strengthened this commitment by providing state funds for the development of a range of services aimed at preventing the need for residential placement.

Yet, placement of children in residential care cannot be avoided in all cases. Children are placed in out-of-home care either because their families are unwilling or unable to care for them, or because they have physical, developmental, emotional, or behavioral problems of such severity that residential care is required.

In New York State, eight separate state agencies are authorized to place children in residential facilities. These agencies and the proportion of the total number of children in residential placement who are under their care are as follows: Department of Social Services (72%), Division for Youth (7%), Office of Mental Retardation and Developmental Disabilities (7%), State Education Department (5%), Office of Mental Health (5%), Division of Substance Abuse Services (2%), Department of Health (1%), and Division of Alcoholism and Alcohol Abuse (0.4%) *(CCF, 1988)*.

The findings of several studies suggest that children placed in residential care for reasons other than severe health problems have a higher incidence of certain health problems than children who live with their families. A study of children in foster care in New York City, for example, found that 45 percent of these children had at least one chronic illness; growth levels were considerably below normal standards; 22 percent had poor vision; mental health impairment was "marked" for 25 percent and "severe" for 10 percent; and 38 percent needed dental treatment (*Kavaler & Swire, 1983*). These health problems, as well as insufficient and fragmented health care for foster children, have been attributed to the children's family histories, procedural limitations of the Medicaid program, and the limitations of the foster care system (*American Academy of Pediatrics, 1987; Moffatt, Peddies, Stulginskas, Pless, & Steinmetz, 1985*).

Delinquent children have been found to have significantly more hopital visits, accidents, and injuries throughout childhood than nondelinquent children *(Lewis & Shanok, 1977)*. Accordingly, children committed to juvenile justice facilities are a population at increased risk for health problems. In a study comparing the health status of 53 delinquent boys aged 13-16 who had spent some period of time in a juvenile justice facility with that of nondelinquent boys from similar communities who had never been committed, findings indicated that the delinquents had many more health conditions requiring treatment and referral, including poor nutritional status, dental decay, and vision and hearing impairments. Whereas 57 percent of the delinquent youth had experienced a serious health problem (i.e., resulting in hospitalization or loss of consciousness) or an automobile accident, only 20 percent of the comparison group had had such problems (*Palfrey, Karniski, Clark, Tomaselli, Meltzer, & Levine, 1983*).

- In New York State, 30,895 children were in residential care in June 1985. Fifty-six percent of these children were from New York City and 44 percent were from counties outside of New York City *(Table 48)*.
- In 1985, most children (0-19 years old) in residential care in New York State were in family care (61%). Another 11 percent were in group care and 27 percent were in institutions *(CCF, 1987a)*.
- The number of New York State children in residential care declined by 30 percent between 1978 and 1985. The number of children in family and institutional care declined by 35 percent and 36 percent respectively, while the number of children in group care increased by 12 percent (*CCF, 1987a*).

Table 48

CHILDREN IN RESIDENTIAL CARE BY COUNTY OF ORIGIN[1] AND AGE JUNE 1985

County	0-4 Yrs.	5-9 Yrs.	10-14 Yrs.	15-19 Yrs	Total in Care	Rate per 1,000 Children
New York State	5,984	5,320	7,497	12,094	30,895	6.3
New York City	3,962	3,293	3,888	6,093	17,236	8.9
Rest of State	2,022	2,027	3,609	6,001	13,659	4.6
Albany	39	41	104	180	364	4.9
Allegany	2	4	14	18	38	2.2
Broome	96	59	95	148	398	6.9
Cattaraugus	23	31	31	39	124	4.6
Cayuga	11	2	24	35	72	3.1
Chautauqua	44	36	70	62	212	5.1
Chemung	33	41	69	69	212	7.7
Chenango	18	7	12	21	58	3.8
Clinton	20	19	25	48	112	4.6
Columbia	13	5	14	27	59	3.6
Cortland	8	10	12	40	70	4.7
Delaware	5	12	11	22	50	3.7
Dutchess	54	49	81	135	319	4.4
Erie	315	323	471	636	1,745	6.5
Essex	4	1	6	18	29	2.9
Franklin	8	6	24	27	65	4.9
Fulton	15	10	26	37	88	5.4
Genesee	14	17	29	43	103	5.8
Greene	6	3	12	13	34	3.1
Hamilton	0	0	0	0	0	0.0
Herkimer	8	9	13	27	57	3.0
Jefferson	9	10	30	40	89	3.3
Lewis	1	2	3	8	14	1.7
Livingston	14	12	19	29	74	4.1
Madison	10	8	15	36	69	3.1
Monroe	142	129	277	477	1,025	5.0
Montgomery	17	7	20	18	62	4.4
Nassau	143	154	218	423	938	2.9
Niagara	44	39	86	102	271	4.4
Oneida	34	40	79	128	281	3.9
Onondaga	145	179	265	354	943	7.0
Ontario	14	19	17	46	96	3.7
Orange	66	75	104	152	397	4.6
Orleans	23	10	25	35	93	8.0
Oswego	32	37	37	59	165	4.3
Otsego	20	19	33	42	114	6.5
Putnam	1	4	12	22	39	1.7
Rensselaer	19	13	30	79	141	3.1
Rockland	28	39	93	207	367	4.8
St.Lawrence	19	18	46	70	153	4.1
Saratoga	13	16	52	57	138	2.8
Schenectady	25	16	65	86	192	5.0
Schoharie	13	16	18	13	60	6.2
Schuyler	3	4	5	11	23	4.5
Seneca	8	5	16	18	47	5.2
Steuben	9	11	18	45	83	2.9
Suffolk	134	100	247	448	929	2.4
Sullivan	23	18	30	56	127	7.1
Tioga	17	24	38	34	113	7.4
Tompkins	10	13	19	39	81	3.0
Ulster	28	25	46	57	156	3.6
Warren	17	15	19	34	85	5.2
Washington	14	15	13	22	64	3.9
Wayne	7	11	11	33	62	2.3
Westchester	170	179	235	445	1,029	4.7
Wyoming	4	8	17	16	45	3.7
Yates	3	0	4	11	18	3.0
Unknown	7	52	204	604	867	**.*

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[1] The county of origin is the county in which the child resided when (s)he first entered care.

Note: Data for New York City boroughs are not available.

Source: New York State Council on Children and Families, Bureau of Research and Information Services, 1987a.

ABUSE AND MALTREATMENT

According to New York State law, *child abuse* occurs when a parent or other person legally responsible for the care of a child under the age of 18 years intentionally causes or places the child at substantial risk of death, disfigurement, or impairment of physical or mental health. Sex offenses, as defined in the penal code, are also encompassed by the definition of child abuse.

Child maltreatment occurs when a child less than 18 years of age is in danger of being physically, mentally, or emotionally impaired because a parent or other legally responsible adult has failed to supply adequate food, shelter, clothing, education, or medical care. Maltreatment also encompasses inadequate supervision, excessive corporal punishment, drug use, or abandonment *(Welfare Research, Inc., 1980)*. (See Technical Note F for the legal definitions of child abuse and maltreatment.)

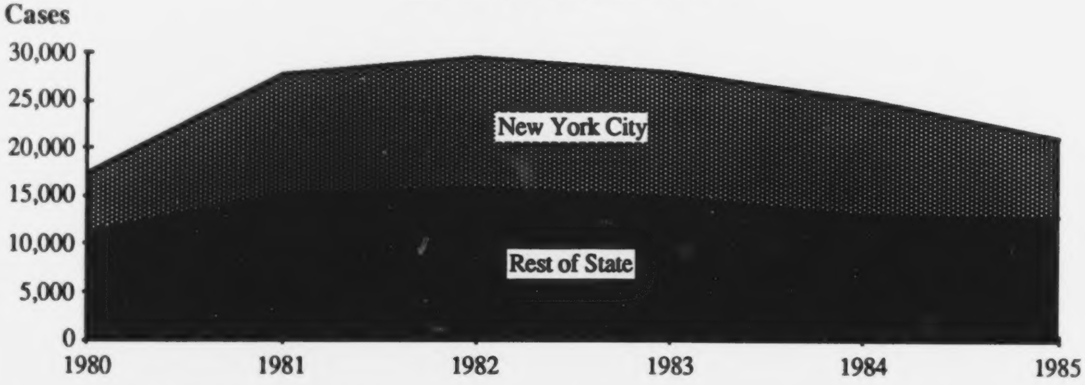
Physically abused or maltreated children may suffer severe and sometimes permanent physical disfigurement, disability, or psychosocial impairment. Child abuse or maltreatment can even result in death *(Miller et al., 1986)*.

Some of the factors associated with a risk of child abuse and maltreatment are related to the child, some to the family, and some to socioeconomic conditions. Often these factors are interrelated. Child-related factors include premature birth and low birth weight; receipt of neonatal intensive care; or the presence of a serious disability, defect, or chronic illness. Family factors associated with increased risk include the absence of either biological parent, alcoholism or an unusually high level of stress in the family, spouse abuse, a parent's history of being abused as a child, and parental immaturity or unrealistically high expectations of the child. Socioeconomic factors that have been found to increase the risk of abuse and maltreatment include poverty, unemployment, social isolation of the family or a family member, living in low-quality or inadequate housing, or living in a high-crime or transient community *(Miller et al., 1986)*.

The problem of child sexual abuse has received increased attention in recent years. In addition to the immediate harm it causes, child sexual abuse often leaves its victims with long-term physical and emotional effects. Both the secrecy of ongoing abuse and disclosure of such abuse traumatize families *(Kempe & Kempe, 1978)*. In New York State, in 1985, approximately 5 percent of all reported allegations of child abuse and maltreatment involved child sexual abuse *(DSS, Bureau of Services Information Systems [BSIS], 1986e)*. However, incidents of sexual abuse are considered to be greatly underreported. For this reason, the rates of sexually transmitted diseases among young children are sometimes used as another way to assess the extent of this problem *(Table 42)*.

Figure 27

Children Involved in Indicated Cases of Child Abuse or Maltreatment New York State, 1980-1985



Source: New York State Department of Social Services, Bureau of Services Information Systems, 1986b, 1986d.

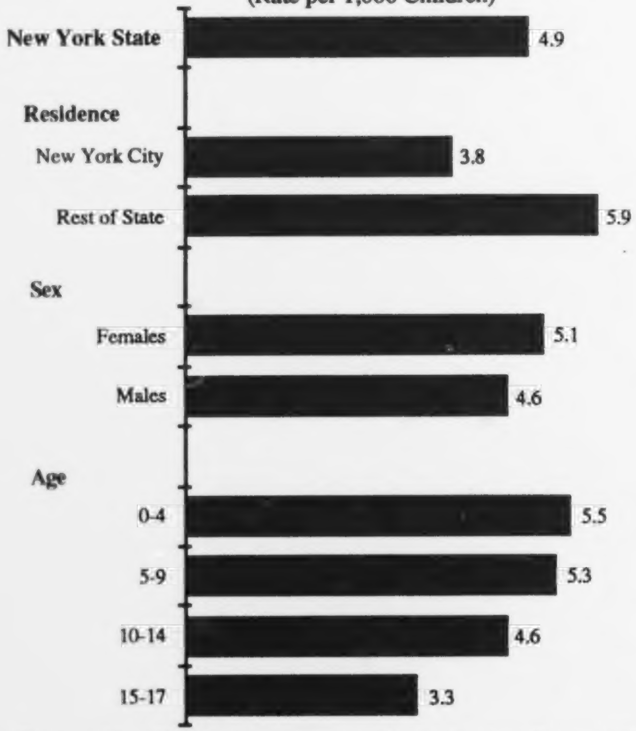
The national objective for child abuse established in 1980 by the U.S. Department of Health and Human Services was that *"By 1990, injuries and deaths to children inflicted by abusing parents should be reduced by at least 25 percent" (DHHS, 1980).* In New York State, the number of children involved in indicated cases* of abuse and maltreatment rose from 17,773 in 1980 to 29,609 in 1982, but then decreased steadily through 1985. Between 1982 and 1985 the number of children in indicated cases of abuse and maltreatment dropped by 28 percent *(Figure 26).*

- In 1985, 124 children in New York State allegedly died of abuse or maltreatment. Forty-three of these allegations were confirmed, 28 were determined to be unfounded, and determinations were still pending for 53 of the deaths *(DSS, BSIS, 1987).*
- A total of 64,819 cases involving child abuse/maltreatment were reported in New York State in 1985. The majority (90%) of the reported cases involved alleged maltreatment; 10 percent involved alleged abuse *(DSS, BSIS, 1986a).*
- The reports of child abuse/maltreatment received by the state in 1985 involved 103,206 children *(DSS, BSIS, 1986a).* Reports were determined to be indicated for at least 21,288 of these children, but the full count was not known due to pending cases *(DSS, BSIS, 1986b).*
- Thirty-two percent of the children in indicated cases were aged 0-4 years, 29 percent were 5-9 years, 26 percent were 10-14 years, and 13 percent were 15-17 years *(DSS, BSIS, 1986d).*
- Whereas the proportions of males (51%) and females (49%) in indicated cases of maltreatment tended to be similar, females were much more likely than males to be the victims of reported child abuse: 75 percent vs. 25 percent in indicated cases *(DSS, BSIS, 1986c).*

Figure 27

Children in Indicated Cases of Abuse or Maltreatment New York State, 1985

(Rate per 1,000 Children)



Sources: New York State Department of Social Services, Bureau of Services Information Systems 1986b, 1986c, 1986d.

**Indicated cases are reported cases of abuse and maltreatment that have been investigated and determined to show credible evidence for such conditions.*

Table 49

SUSPECTED CHILD ABUSE AND MALTREATMENT
CHILDREN 0-17 YEARS
1985

County	Reported Cases		Children in Reported Cases		Rate per 1,000 Children
	Abuse	Maltreatment	Abuse	Maltreatment	
New York State	6,595	58,224	7,672	95,534	23.9
New York City	2,876	26,316	3,261	42,756	26.8
Bronx	691	5,951	803	9,615	31.4
Kings	985	8,925	1,125	15,053	26.4
New York	637	5,811	720	9,138	38.7
Queens	448	4,481	482	7,074	17.8
Richmond	108	1,041	120	1,754	19.4
Rest of State	3,719	31,908	4,411	52,778	22.0
Albany	115	888	143	1,428	24.6
Allegany	27	171	36	293	22.2
Broome	103	715	125	1,153	25.6
Cattaraugus	41	296	48	489	22.4
Cayuga	45	268	55	444	23.7
Chautauqua	71	654	90	1,088	31.9
Chemung	69	573	79	978	43.3
Chenango	24	204	30	357	28.5
Clinton	41	299	46	459	23.9
Columbia	23	177	28	283	21.3
Cortland	31	223	35	375	31.9
Delaware	21	196	27	374	34.2
Dutchess	74	902	82	1,458	24.5
Erie	328	3,171	378	5,470	25.0
Essex	9	118	10	199	23.9
Franklin	22	186	26	348	32.1
Fulton	30	221	41	382	29.2
Genesee	45	247	49	418	29.5
Greene	16	130	18	216	24.4
Hamilton	4	9	6	11	15.5
Herkimer	24	214	30	393	24.5
Jefferson	53	349	65	626	28.2
Lewis	11	56	16	111	17.3
Livingston	21	215	24	364	25.0
Madison	35	238	42	439	25.9
Monroe	258	2,171	302	3,254	19.9
Montgomery	37	170	48	308	28.1
Nassau	195	2,233	215	3,443	12.7
Niagara	78	784	90	1,298	25.5
Oneida	108	902	120	1,696	28.7
Onondaga	223	1,842	259	3,107	28.9
Ontario	48	403	55	630	29.7
Orange	110	867	135	1,408	20.1
Orleans	23	161	26	302	31.7
Oswego	69	480	83	863	28.0
Otsego	36	206	42	387	29.2
Putnam	10	148	13	224	11.3
Rensselaer	77	587	89	1,056	29.3
Rockland	49	552	52	873	13.6
St. Lawrence	57	345	75	600	21.3
Saratoga	56	535	67	926	23.2
Schenectady	48	544	52	840	26.2
Schoharie	11	111	12	181	23.4
Schuyler	15	103	18	188	44.9
Seneca	18	152	20	282	37.3
Steuben	55	364	65	638	27.3
Suffolk	315	2,968	369	4,815	15.2
Sullivan	31	297	42	536	36.1
Tioga	39	249	49	455	36.8
Tompkins	47	337	58	532	27.2
Ulster	83	536	107	860	25.3
Warren	33	267	41	439	33.3
Washington	29	258	32	438	31.9
Wayne	53	381	67	651	29.8
Westchester	172	1,894	211	2,897	16.4
Wyoming	15	121	17	199	19.7
Yates	13	79	13	132	26.8
DFY[1]	10	128	20	144	**.*
OMH[2]	18	103	25	115	**.*
OMRDD[3]	5	24	5	35	**.*

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[1] New York State Division for Youth.

[2] New York State Office of Mental Health.

[3] New York State Office of Mental Retardation and Developmental Disabilities.

Source: New York State Department of Social Services, 1986a.

MOTOR VEHICLE INJURIES AND DEATHS

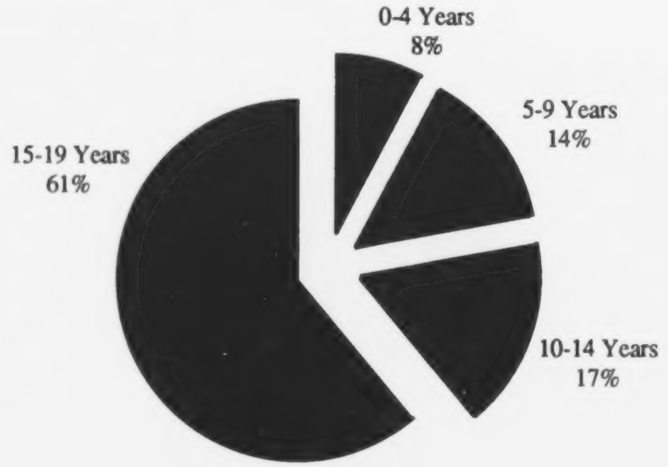
Motor vehicle injuries are the leading cause of death for children aged 1-19 in the United States, and the second most frequent cause of death for infants under one year of age *(DHHS, 1983)*. Nationally, disabling injuries (defined as injuries causing impairments beyond the day of the accident) related to motor vehicle accidents numbered 1,700,000 for all age groups in 1985. Costs, including wage loss, medical expenses, administrative and claim settlement costs of insurance, and property damage, amounted to $50 billion *(National Safety Council [NSC]*, 1986). Emotional, physical, and other costs to victims and their families are incalculable. Risk factors associated with motor vehicle injuries and fatalities include alcohol use, excessive speed, age and sex of driver, and nonuse of occupant restraints *(NSC, 1985)*.

According to the American Academy of Pediatrics *(1984)*, 70-90 percent of all automobile-related deaths and disabling injuries among children under age 5 could be prevented through the use of federally approved child safety seats. In 1985, in New York State, out of 8,183 children below the age of 4 who were involved in car accidents while using child restraints, only 3 were killed.

- In 1985, the New York State motor vehicle fatality rate for children under 15 was 3.5 per 100,000 *(New York State Department of Motor Vehicles [DMV], 1985)*. This rate was lower than the 1990 DHHS objective for the nation of 5.5 per 100,000 *(DHHS, 1980)*.
- In 1985, 399 children (0-19 years) in New York State died of injuries caused by motor vehicles. Sixty-three percent of the victims were between the ages of 15 and 19 years. There were 59,261 cases of motor vehicle injuries to children, a total of 61 percent involving youth 15-19 years of age *(derived from Table 50)*.

Figure 28

Age Distribution of Motor Vehicle Injuries
New York State, 1985



Source: New York State Department of Motor Vehicles, 1986.

Table 50

MOTOR VEHICLE INJURIES AND DEATHS AMONG CHILDREN BY AGE

1985

County	Injuries				Deaths				Rate of Injuries and Deaths per 1,000 Children
	0-4	5-9	10-14	15-19	0-4	5-9	10-14	15-19	
New York State	4,719	8,487	10,187	35,868	28	50	70	251	12.2
New York City	1,873	3,787	3,719	8,865	12	17	18	38	9.5
Bronx	337	707	686	1,351	3	4	1	4	8.3
Kings	706	1,492	1,381	2,738	5	7	11	19	9.3
New York	253	454	431	1,369	1	3	1	3	8.6
Queens	466	960	973	2,520	3	2	4	11	10.3
Richmond	111	174	248	887	0	1	1	1	13.0
Rest of State	2,846	4,700	6,468	27,003	16	33	52	213	14.0
Albany	78	127	158	628	0	0	1	6	13.4
Allegany	16	11	15	107	1	0	1	1	8.7
Broome	48	58	92	420	0	0	3	6	10.9
Cattaraugus	17	27	42	142	0	1	0	1	8.5
Cayuga	27	33	52	203	0	1	0	7	13.7
Chautauqua	37	51	88	286	0	0	0	1	11.1
Chemung	19	46	44	161	0	0	0	2	9.8
Chenango	16	27	25	118	0	0	1	2	12.4
Clinton	20	21	31	165	1	0	3	2	9.9
Columbia	20	40	42	194	0	0	0	1	18.2
Cortland	18	27	23	128	0	0	0	1	13.1
Delaware	15	14	34	161	0	0	1	3	17.0
Dutchess	84	122	158	800	0	2	1	3	16.2
Erie	188	358	536	1,788	0	4	11	12	10.8
Essex	7	15	16	121	0	0	0	3	16.4
Franklin	17	20	40	107	0	1	0	1	14.1
Fulton	20	27	40	155	0	0	0	1	15.0
Genesee	19	40	56	186	0	0	0	2	17.0
Greene	13	21	31	105	1	1	0	1	15.9
Hamilton	1	0	0	7	0	0	0	0	6.5
Herkimer	15	28	30	149	0	1	0	3	11.7
Jefferson	24	33	60	218	0	1	1	3	12.4
Lewis	14	12	17	58	1	0	0	3	12.9
Livingston	10	16	34	147	0	0	2	2	11.6
Madison	8	22	39	187	0	0	1	1	11.7
Monroe	176	303	413	1,292	0	0	3	5	10.7
Montgomery	10	22	22	112	0	0	0	2	11.9
Nassau	383	636	877	3,768	0	3	2	15	17.4
Niagara	60	88	113	485	1	0	1	3	12.2
Oneida	75	107	148	639	0	1	1	6	13.6
Onondaga	110	217	259	939	1	0	1	9	11.5
Ontario	26	48	67	225	0	0	2	5	14.2
Orange	95	172	226	981	1	2	0	8	17.3
Orleans	12	14	15	94	0	0	0	1	11.7
Oswego	26	48	68	381	0	1	0	6	13.7
Otsego	10	13	19	106	0	0	0	0	8.5
Putnam	22	58	75	328	0	0	1	2	20.6
Rensselaer	56	74	98	415	0	1	1	2	14.4
Rockland	66	117	163	849	2	0	0	8	15.7
St. Lawrence	35	47	56	232	1	0	0	1	10.0
Saratoga	43	70	90	514	0	2	1	5	14.9
Schenectady	44	58	98	347	0	1	0	3	14.2
Schoharie	15	15	32	113	0	1	0	1	18.2
Schuyler	3	9	10	37	0	0	0	2	11.9
Seneca	7	18	19	98	0	0	0	1	15.7
Steuben	25	45	37	197	0	1	1	5	10.8
Suffolk	431	691	1,046	4,483	1	3	6	29	17.3
Sullivan	16	31	47	239	0	1	1	4	18.9
Tioga	10	11	19	135	1	0	0	1	11.6
Tompkins	24	29	36	190	1	0	0	0	10.3
Ulster	44	81	122	517	1	2	2	6	17.8
Warren	21	36	54	217	0	0	1	2	20.4
Washington	11	27	43	146	0	0	1	1	13.8
Wayne	28	39	48	211	0	1	0	2	12.2
Westchester	189	355	414	1,825	0	0	1	10	12.9
Wyoming	17	19	19	86	2	1	0	0	11.8
Yates	5	6	12	61	0	0	0	0	13.8

Source: New York State Department of Motor Vehicles, 1986.

MORTALITY

Mortality is the oldest and most basic statistic used to measure the health status of a population. Data about deaths, collected through vital records, are generally very reliable because of the care and thoroughness with which such data are collected and processed. The comparability of mortality data is also very good. Consequently, the death rate for selected populations is a very useful tool for targeting resources and program monitoring.

The most significant limitation of mortality data as a health status indicator is that they do not reflect the status of people with health problems that do *not* lead to death. This limitation is particularly important with regard to the child population, since life-threatening infectious diseases have been replaced in the United States by other health and social conditions as the major threats to child health.

Nevertheless, mortality rates at least suggest the impact of a condition or problem for which data are unavailable. For example, although there are data on suicides, we have only weak estimates of the annual number of attempted suicides and no data on the extent of adolescent depression. Consequently, changes in suicide rates serve as the strongest indicator for monitoring adolescents' mental health needs.

Infant Mortality

Infant mortality is the number of deaths to infants under one year of age. The number of these deaths per 1,000 births is the infant mortality rate.

Infant mortality is one of the most widely used indicators of the health and welfare of population groups in the United States and worldwide. These rates are also used for needs assessment as well as for monitoring the effectiveness of public health programs and health care systems.

Infant mortality data are generally separated into the neonatal period (<28 days) and the post-neonatal period (28 days to 1 year old). Deaths in the neonatal period are closely associated with low birth weight, which accounts for two-thirds of the deaths during the neonatal period and 60 percent of all infant deaths *(McCormick, 1985)*. Neonatal mortality is also associated with influences occurring during the prenatal period, childbirth, or newborn period. Post-neonatal mortality tends to be associated with living conditions, particularly those linked to poverty, inadequate food or sanitation, substandard housing, and lack of access to quality health care *(Miller et al., 1986)*.

The following national objectives were established in 1980 by the U.S. Department of Health and Human Services:

- *By 1990, the national infant mortality rate should be reduced to no more than 9 deaths per 1,000 live births.*
- *By 1990, no county and no racial or ethnic group of the population should have an infant mortality rate in excess of 12 deaths per 1,000 live births.*
- *By 1990, the neonatal death rate (deaths of all infants up to 28 days old) should be reduced to no more than 6.5 deaths per 1,000 live births (DHHS, 1980).*

The following national and state data indicate that as of 1985 these objectives had not yet been met:

- Infant mortality rates in the United States had declined since 1900 from 100 to 11.2 per 1,000 in 1983; however, the infant mortality rate in the United States was higher than that of 17 other industrialized nations *(Wegman, 1985)*.

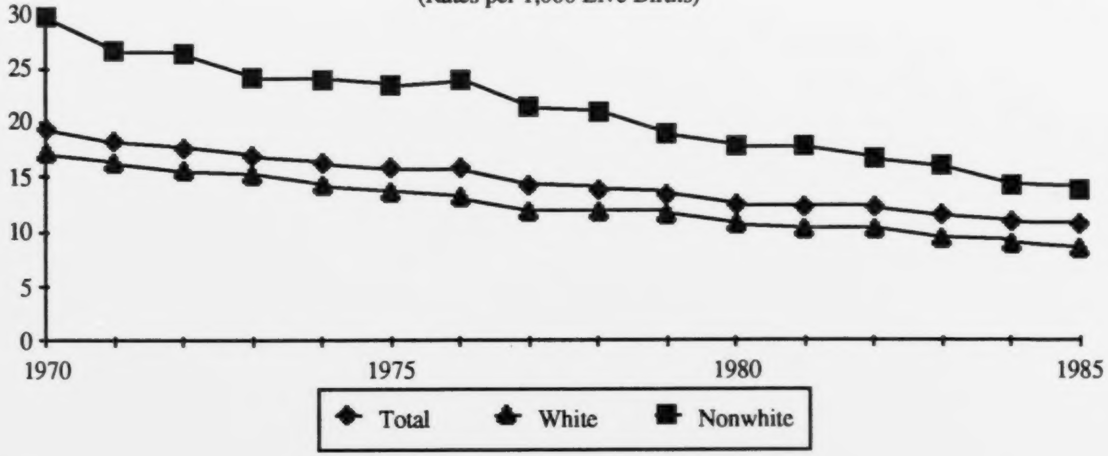
- In New York State, babies born to poor and minority mothers were at the highest risk of dying before their first birthday. Although the infant mortality rate among nonwhites had declined over the last decade, in 1985 the infant mortality rate for nonwhites was 63 percent higher than that for whites (13.9 vs. 8.5/1,000) *(Table 51)*.

- In 1985 in New York State, there were 2,773 infant deaths; 1,899 of these were neonatal, and 874 were post-neonatal *(DOH, Bureau of Biostatistics, 1987)*.

Figure 29

**Infant Mortality Rates by Race
New York State, 1970-1985**

(Rates per 1,000 Live Births)



Source: New York State Department of Health, Bureau of Biostatistics, 1986.

Table 51

INFANT MORTALITY RATES[1] BY RACE
1970-1985

Year	New York State			New York City			Rest of State		
	Total	White	Nonwhite	Total	White	Nonwhite	Total	White	Nonwhite
1970	19.4	17.1	29.6	21.6	17.9	29.5	17.7	16.5	30.1
1971	18.2	16.3	26.5	20.1	17.1	26.6	16.7	15.9	26.3
1972	17.7	15.6	26.3	18.9	15.9	25.0	16.7	15.4	30.1
1973	16.9	15.2	24.1	18.8	16.5	23.4	15.4	14.4	26.2
1974	16.3	14.2	24.0	18.2	15.3	23.5	14.7	13.6	25.3
1975	15.8	13.7	23.4	17.9	14.9	22.8	14.2	13.1	25.3
1976	15.8	13.1	24.0	18.1	13.7	23.7	14.0	12.8	25.2
1977	14.3	11.9	21.4	17.0	13.5	21.3	12.2	11.1	21.6
1978	13.9	11.9	21.0	16.0	13.1	20.6	12.3	11.2	22.2
1979	13.5	11.7	18.9	15.7	13.4	18.3	11.9	10.9	20.6
1980	12.5	10.7	17.8	15.1	13.3	17.0	10.5	9.4	20.1
1981	12.3	10.3	17.8	14.5	11.7	17.5	10.6	9.6	18.6
1982	12.2	10.3	16.7	14.5	11.9	16.7	10.3	9.5	16.9
1983	11.5	9.4	16.0	13.6	10.5	15.3	9.9	8.9	18.1
1984	10.9	9.0	14.3	12.8	9.7	14.0	9.4	8.6	15.3
1985	10.7	8.5	13.9	12.8	9.4	12.9	9.1	8.1	17.0

[1] Deaths to children less than one year of age per 1,000 live births. Rates from 1970 through 1973 have been revised from previously published figures to exclude infant deaths of foreign residents. This adjustment makes the rates in these years consistent with rates in later years.

Source: New York State Department of Health, Bureau of Biostatistics, 1986.

204

205

Table 52

INFANT, NEONATAL, AND POST-NEONATAL MORTALITY
THREE-YEAR AVERAGE, 1983-1985

County	Number Live Births	Infant[1] Mortality		Neonatal[2] Mortality		Post-Neonatal[3] Mortality	
		Number	Rate[4]	Number	Rate[4]	Number	Rate[4]
New York State	252,495	2,786	11.0	1,894	7.5	892	3.5
New York City	110,638	1,445	13.1	956	8.6	489	4.4
Bronx	21,046	304	14.4	194	9.2	110	5.2
Kings	40,387	589	14.6	392	9.7	198	4.9
New York	18,574	227	12.2	142	7.6	85	4.6
Queens	25,713	270	10.5	187	7.3	83	3.2
Richmond	4,918	54	11.0	41	8.3	14	2.8
Rest of State	141,856	1,341	9.5	938	6.6	403	2.8
Albany	3,667	37	10.1	25	6.8	12	3.3
Allegany	676	5	7.4	2	3.0	3	4.4
Broome	2,896	36	12.4	25	8.6	11	3.8
Cattaraugus	1,344	12	8.9	7	5.2	5	3.7
Cayuga	1,174	10	8.5	8	6.8	3	2.6
Chautauqua	2,036	18	8.8	11	5.4	7	3.4
Chemung	1,302	15	11.5	9	6.9	5	3.8
Chenango	711	6	8.4	4	5.6	2	2.8
Clinton	1,348	11	8.2	8	5.9	3	2.2
Columbia	770	7	9.1	3	3.9	3	3.9
Cortland	657	5	7.6	3	4.6	2	3.0
Delaware	621	7	11.3	5	8.1	2	3.2
Dutchess	3,141	22	7.0	17	5.4	5	1.6
Erie	13,304	142	10.7	98	7.4	43	3.2
Essex	482	4	8.3	2	4.2	2	4.2
Franklin	647	6	9.3	6	9.3	1	1.5
Fulton	725	8	11.0	6	8.3	2	2.8
Genesee	922	7	7.6	4	4.3	2	2.2
Greene	510	4	7.8	3	5.9	1	2.0
Hamilton	59	0	0.0	0	0.0	0	0.0
Herkimer	887	9	10.1	7	7.9	2	2.3
Jefferson	1,429	14	9.8	9	6.3	4	2.8
Lewis	407	3	7.4	2	4.9	1	2.5
Livingston	829	4	4.8	2	2.4	2	2.4
Madison	958	7	7.3	4	4.2	3	3.1
Monroe	10,797	109	10.1	73	6.8	36	3.3
Montgomery	685	5	7.3	4	5.8	1	1.5
Nassau	14,877	137	9.2	104	7.0	33	2.2
Niagara	3,092	24	7.8	17	5.5	7	2.3
Oneida	3,705	33	8.9	23	6.2	10	2.7
Onondaga	7,159	78	10.9	52	7.3	26	3.6
Ontario	1,287	10	7.8	7	5.4	3	2.3
Orange	4,191	38	9.1	28	6.7	10	2.4
Orleans	592	3	5.1	3	5.1	1	1.7
Oswego	1,795	14	7.8	8	4.5	6	3.3
Otsego	749	5	6.7	4	5.3	1	1.3
Putnam	1,083	7	6.5	4	3.7	3	2.8
Rensselaer	2,100	19	9.0	15	7.1	5	2.4
Rockland	3,568	30	8.4	21	5.9	9	2.5
St. Lawrence	1,562	13	8.3	9	5.8	4	2.6
Saratoga	2,277	22	9.7	14	6.1	8	3.5
Schenectady	1,997	26	13.0	20	10.0	6	3.0
Schoharie	362	5	13.8	4	11.0	1	2.8
Schuyler	243	2	8.2	1	4.1	1	4.1
Seneca	468	4	8.6	4	8.6	1	2.1
Steuben	1,429	15	10.5	11	7.7	5	3.5
Suffolk	17,104	157	9.2	114	6.7	44	2.6
Sullivan	914	8	8.7	5	5.5	3	3.3
Tioga	747	7	9.4	4	5.4	3	4.0
Tompkins	1,136	12	10.6	10	8.8	2	1.8
Ulster	2,133	26	12.2	18	8.4	8	3.8
Warren	759	9	11.9	6	7.9	2	2.6
Washington	777	6	7.7	3	3.9	3	3.9
Wayne	1,419	12	8.5	8	5.6	4	2.8
Westchester	10,434	99	9.5	70	6.7	28	2.7
Wyoming	607	4	6.6	2	3.3	2	3.3
Yates	308	2	6.5	2	6.5	0	0.0

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[1] Under one year of age.

[2] The first 27 days of life.

[3] From 28 days to under one year of age.

[4] Rate equals the average number of deaths in 1983, 1984, and 1985 per 1,000 of the average number of live births in these years.

Source: New York State Department of Health, Bureau of Biostatistics, 1987.

Table 53

MORTALITY BY AGE
THREE-YEAR AVERAGE, 1983-1985

County	1-4 Years		5-9 Years		10-14 Years		15-19 Years	
	Number	Rate[1]	Number	Rate[1]	Number	Rate[1]	Number	Rate[1]
New York State	451	0.5	259	0.2	316	0.3	980	0.7
New York City	231	0.6	118	0.3	118	0.3	401	0.8
Bronx	48	0.6	25	0.3	27	0.3	81	0.8
Kings	87	0.6	49	0.3	49	0.3	155	0.9
New York	39	0.7	17	0.3	16	0.2	61	0.7
Queens	46	0.5	23	0.2	21	0.2	84	0.6
Richmond	10	0.5	3	0.1	5	0.2	20	0.7
Rest of State	220	0.4	141	0.2	198	0.3	580	0.6
Albany	8	0.6	5	0.3	3	0.2	14	0.6
Allegany	2	0.8	4	1.0	1	0.3	4	0.6
Broome	5	0.5	3	0.2	4	0.3	13	0.7
Cattaraugus	4	0.8	2	0.3	2	0.3	4	0.6
Cayuga	2	0.4	0	0.1	2	0.3	7	1.1
Chautauqua	4	0.5	2	0.2	2	0.2	8	0.6
Chemung	2	0.4	2	0.3	2	0.2	3	0.4
Chenango	2	0.7	0	0.1	2	0.4	3	0.8
Clinton	3	0.6	0	0.1	3	0.5	7	0.8
Columbia	1	0.4	0	0.1	1	0.2	2	0.5
Cortland	1	0.5	0	0.1	1	0.2	3	0.6
Delaware	1	0.3	1	0.4	1	0.4	6	1.3
Dutchess	3	0.2	4	0.2	7	0.4	12	0.6
Erie	20	0.4	12	0.2	19	0.3	46	0.6
Essex	1	0.7	0	0.0	1	0.5	3	1.2
Franklin	0	0.1	1	0.2	1	0.4	5	1.2
Fulton	1	0.3	1	0.2	2	0.4	3	0.7
Genesee	1	0.2	1	0.3	1	0.3	5	0.9
Greene	2	0.9	2	0.7	0	0.1	3	0.9
Hamilton	0	0.0	0	0.0	0	0.0	0	0.0
Herkimer	2	0.4	2	0.5	2	0.3	3	0.6
Jefferson	4	0.7	1	0.1	2	0.2	6	0.8
Lewis	1	0.6	0	0.2	1	0.3	3	1.3
Livingston	1	0.2	0	0.0	2	0.5	3	0.5
Madison	2	0.6	0	0.1	1	0.2	3	0.4
Monroe	15	0.4	8	0.2	13	0.3	32	0.5
Montgomery	0	0.1	1	0.2	1	0.4	6	1.5
Nassau	21	0.4	16	0.2	21	0.2	56	0.6
Niagara	6	0.5	4	0.3	6	0.4	14	0.8
Oneida	3	0.2	4	0.2	6	0.4	17	0.8
Onondaga	8	0.3	7	0.2	6	0.2	23	0.5
Ontario	3	0.5	1	0.2	2	0.4	6	0.8
Orange	7	0.4	5	0.2	5	0.2	17	0.7
Orleans	0	0.0	0	0.1	2	0.7	1	0.3
Oswego	3	0.4	2	0.2	2	0.2	11	0.9
Otsego	1	0.4	0	0.0	1	0.3	4	0.6
Putnam	2	0.4	0	0.1	2	0.4	5	0.8
Rensselaer	3	0.4	2	0.2	3	0.3	7	0.5
Rockland	4	0.3	4	0.2	4	0.2	13	0.6
St. Lawrence	4	0.6	2	0.2	3	0.4	10	0.8
Saratoga	4	0.4	3	0.2	3	0.2	8	0.6
Schenectady	2	0.2	3	0.3	4	0.4	9	0.8
Schoharie	2	1.1	0	0.2	1	0.3	3	0.9
Schuyler	1	1.0	0	0.3	1	0.5	2	1.7
Seneca	1	0.6	0	0.0	0	0.0	2	0.6
Steuben	2	0.4	3	0.4	3	0.4	7	1.0
Suffolk	27	0.4	16	0.2	23	0.2	77	0.7
Sullivan	2	0.7	0	0.1	2	0.4	6	1.3
Tioga	2	0.5	1	0.3	0	0.0	2	0.5
Tompkins	1	0.3	1	0.1	1	0.1	3	0.3
Ulster	5	0.6	3	0.3	3	0.3	8	0.6
Warren	0	0.1	0	0.0	1	0.2	4	0.9
Washington	1	0.4	1	0.2	1	0.2	4	0.9
Wayne	4	0.7	1	0.2	4	0.5	7	0.9
Westchester	10	0.2	10	0.2	10	0.2	42	0.6
Wyoming	3	1.1	1	0.2	1	0.4	2	0.5
Yates	1	0.6	0	0.2	1	0.9	1	0.8

[1] Rate equals the number of deaths per 1,000 children in the specified age group.

Note: Counties with a death in only one of the three years will average 0 deaths. They will, however, register a small death rate.

Source: New York State Department of Health, Bureau of Biostatistics, 1987.

LEADING CAUSES OF DEATH

Accidents

After the first year of life, accidents are the leading cause of death for children and adolescents. For children aged 1-9 years, nonvehicular accidents were the leading cause of death in New York State in 1985, claiming the lives of 133 children.

Motor vehicle accidents were the leading cause of death for children aged 10-19 in 1985. There were 201 such deaths for children aged 10-14, and 257 for adolescents 15-19 years.

Homicide

Between 1983 and 1985, homicide and legal intervention constituted the second leading cause of death for youth aged 15-19 years in New York State. Homicide was the fourth leading cause of death for children in age groups 5-9 and 10-14 years, and fifth for children aged 1-4 years. Although homicide rates are low for children younger than 15, among adolescents the rates are high: 8.9 deaths per 100,000 nationally. In New York State, 44 percent of all deaths among black youth aged 15-19 were attributed to homicide and legal intervention; for white youth in this age group the rate was 11 percent *(Tables 54-56).* Homicide rates are considerably higher for males than for females in the 15-19-year age group but are similar for males and females in younger age groups (*Davis et al., 1986*).

- Over 80 percent of adolescent homicide victims are killed by someone they know, either an acquaintance or a family member *(Davis et al., 1986).*

- It is estimated that the ratio of nonfatal assaults to homicides may be greater than 100:1 (*Rosenberg & Mercy, 1985*).

- In 1985 in New York State, 31 percent of homicide victims aged 19 years or younger were killed by someone in that same age group. Fifteen percent of all of those who committed homicide in 1985 were under 20 years of age *(New York State Division of Criminal Justice Services, nd).*

Suicide

In New York State, suicide is the fourth leading cause of death for adolescents (following motor vehicle accidents, homicide, and other accidents). The substantial increase in the suicide rate has raised considerable alarm in New York and nationwide. The suicide rate for 15-24-year-olds has doubled since 1970 and tripled since 1960. Moreover, it is thought that suicides are undercounted, with many self-inflicted deaths officially reported as accidents. In 1982, the national suicide rate for 15-24-year-olds was highest for white males, at 21.2 per 100,000, followed by 11.0 for black males, 4.5 for white females, and 2.2 for black females *(Miller et al., 1986).*

- In New York State, the suicide rate among youth aged 15-24 in 1985 was 8.5 per 100,000, lower than the 1990 Public Health Service objective of 11.9 per 100,000 for this age group nationwide.

- Estimates of the number of attempted suicides for every completed suicide range from as few as 10:1 to as many as 100:1 (*Governor's Youth Suicide Prevention Council, 1987; Miller et al., 1986*).

Suicides are a tragic and, in many cases, a preventable loss of life. Adolescents who survive suicide attempts may suffer brain damage, broken bones, spinal cord injury, nerve damage, or injury to internal organs (*Miller et al., 1986*).

High-risk groups are thought to include those who have previously attempted suicide (by a method other than drug overdose), youth with a major psychiatric disturbance, troubled youth (i.e., those with a history of learning failure, impulsive behavior, or depression), and youth in families where there has been another suicide. High risk of suicide is also considered to be associated with situational stresses including parental divorce or separation, unwanted pregnancy, romance difficulties, loss of a parent, sense of failure, or recent humiliation (*Governor's Youth Suicide Prevention Council, 1987; Miller et al., 1986*).

Firearms are the most common instrument of suicide for both male and female adolescents. The second most common method for males is hanging; and for females, jumping from a height (*Governor's Youth Suicide Council, 1987*).

Table 54

FIVE LEADING CAUSES OF DEATH FOR CHILDREN BY AGE THREE-YEAR AVERAGE, 1983-1985

Cause of Death	ICD-9 Code[3]	Number[1]	Percentage[2]
Total, Ages 0-19			
1. Other Conditions Originating in the Perinatal Period	760-766,770-779	1,131	24%
2. Congenital Anomalies	740-759	704	15
3. Motor Vehicle Accidents	810-825	434	9
4. Symptoms, Signs, and Ill-Defined Conditions	780-799	426	9
5. Birth Trauma, Intrauterine Hypoxia, Birth Asphyxia, and Respiratory Distress Syndrome	767-769	369	8
Ages <1			
1. Other Conditions Originating in the Perinatal Period	760-766,770-779	1,131	42
2. Congenital Anomalies	740-759	577	21
3. Symptoms, Signs, and Ill-Defined Conditions	780-799	384	14
4. Birth Trauma, Intrauterine Hypoxia, Birth Asphyxia, and Respiratory Distress Syndrome	767-769	358	13
5. Pneumonia and Influenza	480-487	44	2
Ages 1-4			
1. Accidents Other Than Motor Vehicle	800-809,826-949	83	18
2. Congenital Anomalies	740-759	71	16
3. Malignant Neoplasms, Including Neoplasms of Lymphatic and Hematopoietic Tissues	140-208	48	11
4. Motor Vehicle Accidents	810-825	33	7
5. Homicide and Legal Intervention[4]	960-978	23	5
Ages 5-9			
1. Accidents Other Than Motor Vehicle	800-809,826-949	50	19%
2. Motor Vehicle Accident	810-825	48	19
3. Malignant Neoplasms, Including Neoplasms of Lymphatic and Hematopoietic Tissues	140-208	35	13
4. Homicide and Legal Intervention[4]	960-978	21	8
5. Congenital Anomalies	740-759	20	8
Ages 10-14			
1. Motor Vehicle Accidents	810-825	65	20
2. Accidents Other Than Motor Vehicle	800-809,826-949	53	17
3. Malignant Neoplasms, Including Neoplasms of Lymphatic and Hematopoietic Tissue	140-208	45	14
4. Homicide and Legal Intervention[4]	960-978	24	7
5. Congenital Anomalies	740-759	19	6
Ages 15-19			
1. Motor Vehicle Accidents	810-825	284	29
2. Homicide and Legal Intervention[4]	960-978	187	19
3. Accidents Other Than Motor Vehicle	800-809,826-949	102	10
4. Suicide	950-959	85	9
5. Malignant Neoplasms, Including Neoplasms of Lymphatic and Hematopoietic Tissues	140-208	67	7

[1] Number includes deaths for white children, children of races other than white (nonwhite), and children with race not specified.

[2] Percentage of deaths for each cause occurring in the specified age group.

[3] International Classification of Diseases, 9th Revision.

[4] Death by legal intervention is a term used to classify deaths resulting from police action (and in other states, execution). Between 1983 and 1985, legal intervention was the cause of death for six children in New York State, all of them 15-19 years of age.

Source: New York State Department Health, Bureau of Biostatistics, 1987.

Table 55

FIVE LEADING CAUSES OF DEATH FOR WHITE CHILDREN BY AGE THREE-YEAR AVERAGE, 1983-1985

Cause of Death	ICD-9 Code[2]	Number	Percentage[1]
Total, Ages 0-19			
1. Other Conditions Originating in the Perinatal Period	760-766,770-779	632	20%
2. Congenital Anomalies	740-759	520	17
3. Motor Vehicle Accidents	810-825	378	12
4. Accidents Other Than Motor Vehicle	800-809,826-949	231	7
5. Symptoms, Signs, and Ill-Defined Conditions	780-799	225	7
Ages <1			
1. Other Conditions Originating in the Perinatal Period	760-766,770-779	631	37
2. Congenital Anomalies	740-759	422	25
3. Birth Trauma, Intrauterine Hypoxia, Birth Asphyxia, and Respiratory Distress Syndrome	767-769	225	13
4. Symptoms, Signs, and Ill-Defined Conditions	780-799	196	12
5. Diseases of the Heart	390-398,402,404-429	29	2
Ages 1-4			
1. Accidents Other Than Motor Vehicle	800-809,826-949	57	19
2. Congenital Anomalies	740-759	54	18
3. Malignant Neoplasms, Including Neoplasms of Lymphatic and Hematopoietic Tissues	140-208	38	13
4. Motor Vehicle Accidents	810-825	26	9
5. Homicide and Legal Intervention	960-978	12	4
Ages 5-9			
1. Motor Vehicle Accidents	810-825	34	19
2. Accidents Other Than Motor Vehicle	800-809,826-949	33	19
3. Malignant Neoplasms, Including Neoplasms of Lymphatic and Hematopoietic Tissues	140-208	27	15
4. Congenital Anomalies	740-759	16	9
5. Homicide and Legal Intervention	960-978	11	6
Ages 10-14			
1. Motor Vehicle Accidents	810-825	54	23
2. Accidents Other Than Motor Vehicle	800-809,826-949	40	17
3. Malignant Neoplasms, Including Neoplasms of Lymphatic and Hematopoietic Tissues	140-208	34	14
4. Homicide and Legal Intervention	960-978	16	7
5. Congenital Anomalies	950-959	15	6
Ages 15-19			
1. Motor Vehicle Accidents	810-825	263	36
2. Accidents Other Than Motor Vehicle	800-809,826-949	82	11
3. Homicide and Legal Intervention	960-978	79	11
4. Suicide	950-959	75	10
5. Malignant Neoplasms, Including Neoplasms of Lymphatic and Hematopoietic Tissues	140-208	56	8

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[1] Percentage of deaths for each cause occurring in the specified age group.
[2] International Classification of Diseases, 9th Revision.

Source: New York State Department of Health, Bureau of Biostatistics, 1987.

Table 56

FIVE LEADING CAUSES OF DEATH FOR NONWHITE CHILDREN BY AGE THREE-YEAR AVERAGE, 1983-1985

Cause of Death	ICD-9 Code[2]	Number	Percentage[1]
Total, Ages 0-19			
1. Other Conditions Originating in the Perinatal Period	760-766,770-779	403	28%
2. Symptoms, Signs, and Ill-Defined Conditions	780-799	186	13
3. Congenital Anomalies	740-759	150	10
4. Homicide and Legal Intervention	960-978	132	9
5. Birth Trauma, Intrauterine Hypoxia, Birth Asphyxia, and Respiratory Distress Syndrome	767-769	117	8
Ages <1			
1. Other Conditions Originating in the Perinatal Period	760-766,770-779	403	44
2. Symptoms, Signs, and Ill-Defined Conditions	780-799	162	18
3. Congenital Anomalies	740-759	127	14
4. Birth Trauma, Intrauterine Hypoxia. Birth Asphyxia, and Respiratory Distress Syndrome	767-769	117	13
5. Pnuemonia and Influenza	480-487	20	2
Ages 1-4			
1. Accidents Other Than Motor Vehicle	800-809,826-949	25	18
2. Congenital Anomalies	740-759	15	11
3. Homicide and Legal Intervention	960-978	13	9
4. All Other External Causes	980-999	11	8
5. Malignant Neoplasms, Including Neoplasms of Lymphatic and Hematopoietic Tissues	140-208	9	6
Ages 5-9			
1. Accidents Other Than Motor Vehicle	800-809,826-949	17	22
2. Motor Vehicle Accidents	810-825	14	18
3. Homicide and Legal Intervention	960-978	9	12
4. Malignant Neoplasms, Including Neoplasms of Lymphatic and Hematopoietic Tissues	140-208	7	9
5. Congenital Anomalies	740-759	4	5
Ages 10-14			
1. Accidents Other Than Motor Vehicle	800-809,826-949	11	16
2. Malignant Neoplasms, Including Neoplasms of Lymphatic and Hematopoietic Tissues	140-208	10	14
3. Motor Vehicle Accidents	810-825	9	13
4. Homicide and Legal Intervention	960-978	7	10
5. Chronic Obstructive Pulmonary Diseases and Allied Conditions	490-491,493-496	4	6
Congenital Anomalies	740-759	4	6
Ages 15-19			
1. Homicide and Legal Intervention	960-978	103	44
2. Motor Vehicle Accidents	810-825	19	8
3. Accidents Other Than Motor Vehicle	800-809,826-949	18	8
4. Diseases of the Heart	390-398,402,404-429	11	5
5. Malignant Neoplasms, Including Neoplasms of Lymphatic and Hematopoietic Tissues	140-208	10	4

Note: Footnotes and source are the same as for Table 54.

Table 57

EXTERNAL CAUSES OF DEATH: ACCIDENTS, SUICIDES, AND HOMICIDES, BY AGE

1985

			Accidents							
	Total[1]		Motor Vehicle		Non-Motor Vehicle		Suicides		Homicides	
County	<15	15-19	<15	15-19	<15	15-19	<15	15-19	<15	15-19
New York State	477	635	156	257	180	93	13	80	84	180
New York City	178	245	40	38	64	26	2	13	35	148
Bronx	43	55	7	3	14	4	0	4	14	33
Kings	82	117	20	16	28	13	0	3	19	80
New York	25	29	3	4	6	4	2	1	7	18
Queens	30	36	8	11	14	3	0	4	4	17
Richmond	8	8	2	4	2	2	0	1	1	0
Rest of State	299	390	116	219	116	67	11	67	49	32
Albany	6	11	1	7	5	2	0	1	0	1
Allegany	5	3	2	1	3	1	0	1	0	0
Broome	6	7	3	7	3	0	0	0	0	0
Cattaraugus	3	2	3	1	0	1	0	0	0	0
Cayuga	4	6	2	6	1	0	0	0	1	0
Chautauqua	2	5	0	1	1	2	0	1	1	1
Chemung	0	4	0	2	0	1	0	0	0	1
Chenango	4	1	3	1	0	0	0	0	1	0
Clinton	4	3	3	2	1	0	0	1	0	0
Columbia	0	0	0	0	0	0	0	0	0	0
Cortland	3	1	0	1	3	0	0	0	0	0
Delaware	3	4	1	2	2	2	0	0	0	0
Dutchess	8	6	4	5	3	0	0	1	1	0
Erie	34	30	14	17	8	4	4	5	6	4
Essex	3	3	1	2	2	0	0	1	0	0
Franklin	3	1	1	1	1	0	0	0	1	0
Fulton	3	3	0	1	3	1	0	1	0	0
Genesee	0	2	0	2	0	0	0	0	0	0
Greene	2	2	2	2	0	0	0	0	0	0
Hamilton	0	0	0	0	0	0	0	0	0	0
Herkimer	4	3	1	1	3	1	0	1	0	0
Jefferson	3	4	2	3	0	0	0	1	1	0
Lewis	1	5	1	5	0	0	0	0	0	0
Livingston	2	3	2	3	0	0	0	0	0	0
Madison	1	4	1	2	0	0	0	1	0	0
Monroe	15	12	4	4	5	2	0	1	6	5
Montgomery	1	2	0	1	1	0	0	1	0	0
Nassau	17	29	6	15	9	6	0	4	2	4
Niagara	4	6	1	5	2	1	1	0	0	0
Oneida	12	13	2	4	6	2	1	4	0	2
Onondaga	13	19	2	11	5	1	0	6	6	1
Ontario	2	4	1	4	0	0	1	0	0	0
Orange	4	13	2	7	2	2	0	4	0	0
Orleans	0	2	0	2	0	0	0	0	0	0
Oswego	2	9	2	5	0	1	0	3	0	0
Otsego	1	1	0	0	0	0	1	1	0	0
Putnam	3	4	1	2	1	0	1	0	0	2
Rensselaer	7	4	3	2	3	1	0	1	1	0
Rockland	7	9	5	1	1	4	0	2	1	1
St. Lawrence	2	4	1	0	1	1	0	2	0	0
Saratoga	4	6	3	6	1	0	0	0	0	0
Schenectady	8	12	2	5	5	2	0	5	1	0
Schoharie	2	5	0	2	2	2	0	1	0	0
Schuyler	2	3	1	1	1	2	0	0	0	0
Seneca	0	2	0	1	0	0	0	1	0	0
Steuben	5	8	2	4	2	2	0	2	1	0
Suffolk	33	49	14	29	15	10	1	6	3	4
Sullivan	3	7	0	5	3	1	0	1	0	0
Tioga	1	2	1	2	0	0	0	0	0	0
Tompkins	1	0	0	0	0	0	0	0	1	0
Ulster	11	11	5	7	6	3	0	0	0	1
Warren	0	4	0	2	0	1	0	1	0	0
Washington	2	2	1	1	1	1	0	0	0	0
Wayne	2	7	2	5	0	1	0	1	0	0
Westchester	14	27	4	10	4	6	0	5	4	5
Wyoming	5	0	3	0	0	0	1	0	1	0
Yates	2	1	1	1	1	0	0	0	0	0

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[1] The total includes a small number of deaths from external causes that are other than those specified.

Source: New York State Department of Health, Bureau of Biostatistics, 1987.

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TECHNICAL NOTES

A. Small Number Variation (see Introduction and page 1)

When rates are based on a small number of events or a small population, they are subject to wide fluctuation by chance alone. Accordingly, inferences about the meaning of variations in such rates cannot be made with certainty. Readers, therefore, are advised to use caution in interpreting rates used in this report if the number of events or population base is small. To increase the stability of rates based on small numbers, it is helpful to combine multiple years of data (as we have done in Tables 39 and 53) or combine data for several counties.

B. Health Insurance Coverage: Using the Current Population Survey (see page 27)

Data on the distribution of health insurance coverage are from the March 1985 Current Population Survey (CPS). The CPS is conducted monthly by the United States Department of Commerce, Bureau of the Census, on a sample population that is representative of the nation. Similarly, the New York State extract of this sample is representative of the state's population.

In addition to questions on demographic characteristics, income, and employment status, the March CPS includes questions on health insurance coverage.

According to an internal analysis by the New York State Department of Social Services (DSS), the CPS estimate of individuals not covered by insurance is too high for two reasons: first, because the number of individuals reporting that they are covered by Medicaid is considerably lower than the number in DSS' own records; and second, because many people who are not currently enrolled in the program are in fact eligible, and would be covered by Medicaid if they required medical treatment.

Accordingly, DSS estimates that approximately 520,000 children in New York State under 21 years of age were not covered by health insurance in 1985, including an estimated 125,000 poor children *(DSS, Office of Program Planning, Analysis and Development, 1988).*

C. Weighted Average Poverty Thresholds: 1985
(see pages 8 and 28)

Size of Family Unit	Poverty Threshold
One person (unrelated individual)	$5,469
15 to 64 years	5,593
65 years and over	5,156
Two persons	6,998
Householder 15 to 64 years	7,231
Householder 65 years and over	6,503
Three persons	8,573
Four persons	10,989
Five persons	13,007
Six persons	14,696
Seven persons	16,976
Eight persons	18,512

Source: United States Department of Commerce, Bureau of the Census, 1987.

D. Socioeconomic Status: Methodology (see page 37)

The New York State Department of Health, in collaboration with the Community Services Research and Development Program of the State University of New York at Buffalo, developed a methodology for establishing socioeconomic status (SES) scores for all census tracts and minor civil divisions in New York State, using the method developed by the Centers for Disease Control in Atlanta and adapted to New York State excluding New York City. The SES score was calculated from data for the following three characteristics available on census tapes for each geographic area:

- median school years completed by persons 25 years old and over
- percentage of unskilled workers among employed persons 16 years old and over
- median income of families

These three measures of variability were divided into five ranges, with values from 0 through 4 (at intervals of one) assigned to each, as shown in the accompanying table. The SES score for each geographic area was based on the sum of values in these three categories. Thus, the SES scale ranges from 0 (lowest status) to 12 (highest status). SES scores were then operationally defined as either high (SES = 11-12), medium (SES = 8-10), or low (SES = 0-7).

Basis for Calculating Socioeconomic Status Scores for New York State Excluding New York City From 1970 Census*

Value	Median School Years Completed	Percentage of Unskilled Workers	Median Family Income
0	0.00 - 8.49	35.0+	$ 0 - 5,599
1	8.50 - 9.74	22.0 - 34.9	$ 5,600 - 8,499
2	9.75 - 10.99	14.5 - 21.9	$ 8,500 - 10,199
3	11.00 - 11.99	11.5 - 14.4	$10,200 - 12,249
4	12.00+	0.0 - 11.4	$12,250+

*Socioeconomic Status Score = Sum of the three values.

E. Counties Within Health Service Areas in New York State (see pages 37 and 59)

Western
Allegany
Cattaraugus
Chautauqua
Erie
Genesee
Niagara
Orleans
Wyoming

Finger Lakes
Chemung
Livingston
Monroe
Ontario
Schuyler
Seneca
Steuben
Wayne
Yates

Central
Cayuga
Cortland
Herkimer
Jefferson
Lewis
Madison
Oneida
Onondaga
Oswego
St. Lawrence
Tompkins

Southern Tier
Broome
Chenango
Tioga

Northeastern
Albany
Clinton
Columbia
Delaware
Greene
Essex
Franklin
Fulton
Hamilton
Montgomery
Otsego
Rensselaer
Saratoga
Schenectady
Schoharie
Warren
Washington

Hudson Valley
Dutchess
Orange
Putnam
Rockland
Sullivan
Ulster
Westchester

New York City
Bronx
Kings
New York
Queens
Richmond

Nassau-Suffolk
Nassau
Suffolk

F. Definitions of Child Abuse, Neglect and Maltreatment (see page 82)

Abuse. Section 1012(e) of the Family Court Act defines an abused child as a child less than eighteen years of age whose parent or other person legally responsible for his or her care:

(i) inflicts or allows to be inflicted upon such child physical injury by other than accidental means which causes or creates a substantial risk of death, or serious or protracted disfigurement, or protracted impairment of physical or emotional health, or protracted loss or impairment of the function of any bodily organ, or

(ii) creates or allows to be created a substantial risk of physical injury to such a child by other than accidental means which would be likely to cause death or serious or protracted disfigurement, or protracted impairment of physical or emotional health, or protracted loss or impairment of the function of any bodily organ, or

(iii) commits, or allows to be committed, a sex offense against such a child, as defined in the penal law, or allows such child to engage in acts or conduct described in penal law (NYS Penal Law, Articles 263, 230.25, 230.30, 230.32, 255.25). (These acts are: using a child in a sexual performance, and promoting a sexual performance by a child.)

Neglect. Section 1012(f) of the Family Court Act defines a neglected child as a child less than eighteen years of age:

(i) whose physical, mental, or emotional condition has been impaired or is in imminent danger of becoming impaired as a result of the failure of his parent of other person legally responsible for his care to exercise a minimum degree of care:

(A) in supplying the child with adequate food, clothing, shelter, or education in accordance with provisions of part one of article sixty-five of the education law, or medical, dental, optometrical, or surgical care, though financially able to do so or offered financial or other reasonable means to do so; or

(B) in providing the child with proper supervision or guardianship, by unreasonably inflicting, or allowing to be inflicted, harm, or a substantial risk thereof, including the infliction of excessive corporal punishment, or by using a drug or drugs; or by using alcoholic beverages to the extent that he loses self-control of his actions; or by any other acts of a similarly serious nature requiring the aid of the court; or

(ii) who has been abandoned by his parents or other person legally responsible for his care.

Maltreatment. Social Services Law, Sec. 412, states that a maltreated child includes a child under eighteen years of age: (a) defined as a neglected child by the Family Court Act; or (b) who has had serious physical injury inflicted upon him or her by other than accidental means.

INDEX

- **Abortion,** 39, 49, 53
- **Abuse**
  - Alcohol, 56-57
  - Child, *see* Child Abuse
  - Drug, 56-59
  - Substance, 56-59
- **Access to Health Care,** 5, 8, 12, 27-37, 60, 87
- **Accidents,** 3, 56, 60, 85-86, 92-95
- **Acquired Immune Deficiency Syndrome** (AIDS), 72-73
- **Adolescents**
  - Abuse, 83
  - AIDS, 72-73
  - Cancer, 64-65
  - Employment, 12
  - Hospital Discharge Diagnoses, 60-61
  - Induced Abortions, 38, 53
  - Infectious Diseases, 66
  - Live Births, 38, 49-50, 52
    - Low Birth Weight Infants, 41, 45, 47, 50
    - Premature Infants, 42, 44
  - Mortality, 91-95
  - Motor Vehicle
    - Deaths, 85-86
    - Injuries, 85-86
  - Percentage in Total Population, 3
  - Pregnancy
    - Number, 51
    - Outcomes, 38
    - Previous, 50, 54-55
    - Rates, 49, 51
  - Prenatal Care, 30
  - Residential Care, 80-81
  - Sexually Transmissible Diseases, 69, 71
  - Substance Abuse, 56-59
- **AFDC,** *see* Aid to Families with Dependent Children
- **Age Distribution,** *see* Demographic Characteristics
- **Aid to Families with Dependent Children** (AFDC), 18, 20-21
- **AIDS** , *see* Acquired Immune Deficiency Syndrome
- **Alcohol Use,** 56-57, 74, 84-85
- **Asian,** *see* Race
- **Attention Disorders,** 63
- **Autism,** *see* Disabilities
- **Birth,** 38, 49-50, 52, 54-55, 74
  - Defects, 41, 48, 56, 60, 66, 74-75, 93-95
  - Live, 17, 32-33, 39-40, 49-50, 52, 90
  - Premature, 38, 41-44, 82
  - Stillborn, 30, 38
  - Weight, *see* Low Birth Weight
- **Black,** *see* Race
- **Cancer,** 64-65, 93-95
- **Cerebral Palsy,** see Disability
- **Child Abuse,** 56, 82-84, 107
- **Childhood**
  - Diseases, 34, 66-67
  - Morbidity, 60, 72, 74
- ***Chlamydia*,** 69
- **Chronic Health Problems,** 36, 41, 48, 80, 84
- **Cocaine,** *see* Substance Abuse
- **Committees on Special Education** (CSE), 78- 79
- **Communicable Diseases,** *see* Infectious Diseases
- **Congenital Malformations,** 41, 48, 56, 60-61, 66, 74-75, 84, 93-95
- **Congenital Syphilis,** 69-70
- **Death,** 3, 5, 8, 30, 34, 38, 41, 56, 63, 72-73, 82, 85-96
  - Drowning, 56
  - Leading Causes of, 92-95
  - *see also* Mortality
- **Delayed Development,** 63
- **Delinquent Youth,** 80
- **Demographic Characteristics**
  - Age Distribution, 3-4
  - Population Size, 3-4
  - Race, 1, 5, 31, 40, 42-43, 45-46, 56, 87, 89
  - Sex, 1
- **Dental Status,** 19, 36-37, 80
- **Depression,** 87

- **Diphtheria**, *see* Infectious Diseases
- **Disability**, 18, 41, 74, 76-77, 82, 84, 87
  - Developmental, 41, 74, 76-77
    - Autism, 76,77,79
    - Cerebral Palsy, 76-77
    - Epilepsy, 76-77
    - Mental Retardation, 41, 56, 63, 76-79
    - Neurological Impairment, 76-77
  - Emotional, 78, 79
  - Injury, 85
  - Learning, 63, 78-79
- **Discharge Diagnoses**, 60, 61, 62
- **Drug Dependency**, 3, 56, 66, 72, 74
- **Economic Status**, 18
- **Education**, 16-17, 36, 41
  - *see also* School
- **Emotionally Disabled**, *see* Disability
- **Employment**, 12-13, 18, 49
- **Encephalitis**, 69
- **Epilepsy**, *see* Disability
- **Erythrocyte Protoporphyrin (EP)**, 63
- **Ethnicity**, 1, 5, 87
  - Hispanic, 5, 8, 9, 56, 72
  - *see also* Race
- **Failure to Thrive**, 19, 72
- **Family Care**, *see* Residential Care
- **Family Structure**, 9, 11, 12, 14-15
- **Fetal**
  - Alcohol Syndrome, 56
  - Deaths, 39, 49
  - *see also* Infant
- **Foster Care**, see Residential Care
- **Gestation**, 39, 41-43, 74-75
- **Gonorrhea**, *see* Sexually Transmissible Diseases
- **Group Care**, *see* Residential Care
- **Growth**, 80
- **Handicapping Conditions**, 78-79
  - *see also* Disability
- **Health Care Access**, *see* Access to Health Care
- **Health Insurance**, 8, 12, 27-29, 104
- **Hepatitis**, 66, 68
- **Herpes**, 69
- **Hispanic**, *see* Ethnicity
- **Home Relief (HR)**, 19, 20, 22
- **Homeless**, 19, 66
- **Homicide**, *see* Mortality
- **Hospital Discharge Diagnoses**, *see* Discharge Diagnoses
- **Human Immunodeficiency Virus (HIV)**, 66, 72-73
- **Immunization Status**, 34-35
- **Inborn Metabolic Defect**, 74-75
- **Income**, 8, 19, 28, 36, 38, 63, 85-86
  - Maintenance Programs, 18, 20
  - *see also* Poverty
- **Induced Termination of Pregnancy**, *see* Abortion
- **Infants**, 3, 19
  - AIDS, 72
  - Hospital Discharge Diagnoses of, 60-61
  - Mortality, 5, 48, 87-90
    - Leading Cause of Death, 93-95
  - *see also* Low Birth Weight; Prematurity; Prenatal Care
- **Infant Health Assessment Program (IHAP)**, 74-75
- **Infectious Diseases**, 34, 66-68, 72
- **Injury**, 85-86
  - *see also* Accidents
- **Institutional Care**, *see* Residential Care
- **Juvenile Justice**, *see* Residential Care
- **Labor Force Status**, *see* Employment
- **Lead Poisoning**, 5, 19, 63-64
- **Leading Causes of Death**, *see* Death
- **Learning Disability**, *see* Disabilities
- **Leukemia**, 3, 64
- **Live Births**, *see* Birth
- **Low Birth Weight**, 5, 19, 27, 30, 38, 41, 46-47, 49-50, 74-75, 82, 87
- **Low Income**, 19, 27, 63
- **Maltreatment**, 82-84, 107

INDEX (continued)

Maternal Age
  Abortion, 53
  Education, 17
  Live Births, 40, 50, 52, 54-55
  Prenatal Care, 30-31, 33
  Pregnancy, 38, 49-51, 54-55
  see also Low Birth Weight, Prematurity
Measles, *see* Infectious Diseases
Medicaid, 27-29, 104
Mental Retardation, *see* Disability
Morbidity, 60-73
Mortality
  Homicide, 5, 56, 92-95
  Infant, 5, 48, 87-90
  Neonatal, 87-89
  Post-neonatal, 87-88, 90
  Suicide, 87, 92-95
  see also Death
Motor Vehicle
  Deaths, 85-86, 92-95
  Injuries, 85-86
Mumps, *see* Infectious Diseases
National School Lunch Program, 19-20, 26
  see also Nutrition
Native American, 7
Neglect, 41, 107
  see also Abuse, Maltreatment
Neonatal
  Intensive Care Unit (NICU), 74-75, 82
  Mortality, 41, 87-89
Neurological Impairment, *see* Disability
Nonwhite, *see* Race
Nutrition, 38
  Assistance Programs, 19, 20, 24-26
  Deficit, 5, 19, 41, 80
Obesity, 19
Parent's Education, *see* Education
Parenting, 74, 84
PCP, *see* Substance Abuse
Pertussis, *see* Infectious Diseases
Polio, *see* Infectious Diseases
Population Size, 1-2
Poverty, 5, 8-9, 11, 14, 18-19, 27-28, 34, 84, 87-88, 104
  see also Income
Pregnancy, 38-40, 49-55, 69, 72
  Outcomes, 38-39, 56, 69, 72
  Previous, 50, 54-55
  Rate, 49-50
  Related Problems, 49, 69, 72, 87
Premature Births, *see* Birth
Prenatal Care, 5, 27, 30-33, 38, 41, 50
Preventive Care, 8, 27
Public Assistance Programs, 18-26
Race, 1, 5-7, 31, 40, 42-43, 45-46, 56, 87, 89
  Asian, 5,7
  Nonwhite, 5, 30, 32, 34, 40-43, 45-46, 50, 54, 88-89
  White, 5, 8-9, 12, 30, 32, 36, 40-46, 50, 54, 56, 88-89, 92
  see also Ethnicity
Residential Care, 14, 15, 23, 28-29, 78, 80-81
Rubella, *see* Infectious Diseases
School, 19, 34-36, 49, 78-79
  see also Education
Sedatives, *see* Substance Abuse
Sexually Transmissible Diseases, 69-72
Single-parent Families, 8, 10, 12, 14-15
SNAP, *see* Supplemental Nutrition Assistance Program
Socioeconomic Status, 8-17, 37, 41, 82, 105
SPARCS, *see* Statewide Planning & Research Cooperative System
Special Education, 34-35, 78-79
Special Supplemental Food Program for Women, Infants, & Children (WIC), 19-20, 24
Speech Impaired, 78-79
SSI, *see* Supplemental Security Income
Statewide Planning & Research Cooperative System (SPARCS), 27, 60
Stillborn, *see* Birth
Stimulants, *see* Substance Abuse

Students with Handicapping Conditions, 78-79
Substance Abuse, 41, 56-59, 66, 74, 84
Suicide, *see* Mortality
Supplemental Nutrition Assistance Program (SNAP), 19-20, 24
Supplemental Security Income (SSI), 19-20, 23
Syphilis, *see* Sexually Transmissible Diseases
Tetanus, 34, 66-67
Tranquilizers, see Substance Abuse
Tuberculosis (TB), see Infectious Diseases
Unemployment, 12-13, 18, 49, 84
White, *see* Race
WIC, *see* Special Supplemental Food Program for Women, Infants, & Children
WIN, *see* Work Incentive Program
Work Incentive Program (WIN), 18

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